CHAIN STORE ACCOUNTING

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PREFACE

This book represents an attempt to set forth simply and clearly the functions and requirements of an accounting system for a chain of retail stores. It discusses the purposes to be served by proper accounting methods, the use of the methods in actual operation, and the possibilities of presenting and utilizing advantageously the data collected. While a portion of the work is of technical character and interesting only to accountants, a large part of the material is general in its nature and should prove of assistance to any chain store manager or executive who finds himself even indirectly concerned with the accounting problems of his enterprise.

Accounting for a chain of stores presents many problems fundamentally different from those encountered in the ordinary retail enterprise. In recent investigations of the accounting problems of retailers the writer has been increasingly impressed with this fact. Many chain store concerns—the outgrowth of single individual enterprises—seem not to have recognized the extent of this difference or the changes in procedure necessary to give them adequate control of their operations. This is particularly true of the small and medium sized concerns, comprising from three or four to a score of stores. It is with their situation prominently in mind that much of the material in this book has been prepared.

In most instances the owners of the chain are those who originally owned merely a single store, and frequently the accountant of the chain is likewise the accountant who formerly recorded the affairs of the individual enterprise. As the business develops the accountant, like the owner and manager, finds himself faced with problems of a novel and complex nature. Whether the accountant be a new or old member of the staff, and whether he be employee or one of the managers, it becomes essential for him to acquire a knowledge of new methods and principles, if his accounting system is to be efficient in operation and productive of the desired results.

The author believes that as a guide for individuals who find themselves in this situation the material in the following pages will prove of value. The methods and procedure recommended are developed from an elementary basis, so that a reader with no foundation other than a knowledge of the principles of double entry bookkeeping should be able to follow without difficulty the suggestions and explanations set forth.

The chapters in the text describe in order the method of recording the various transactions which take place in the retail stores, the reports to be rendered to the head office, the forms and procedure used by the central office accounting department, and the presentation and analysis of results by means of statements and reports. The discussion for the most part applies to the chain store field as a whole. Specific attention to the special problems of different types of stores is given in the closing chapters of the book.

In the preparation of this manuscript and in the study and investigation which preceded it the author has received invaluable aid and counsel from many friends and acquaintances in both the accounting and chain store fields. The writer's obligation to those who have extended their courtesies and assistance is great, and he welcomes the opportunity to add this word of public acknowledgment to the thanks which he has already expressed more directly to those concerned. A special debt is owed to Mr. T. J. O'Leary, who, during his association with the writer, gave freely of his time in securing material and offering valuable suggestions as to methods and procedure.

The service of the public in every channel of commercial activity demands constantly greater knowledge of the facts of business operations and the means of obtaining those facts accurately and economically. If this book shall have contributed at all to such knowledge the writer will feel well repaid for the task of its preparation.

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COLUMBUS, OHIO,
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CHAPTER I

THE CHAIN STORE FIELD FROM AN ACCOUNTING STANDPOINT

The present generation has seen many new developments in retail merchandising, among which the growth of the chain store idea stands out prominently. This idea is older than a generation, but it is within the last 25 years that it has made its greatest strides. Nor is it difficult to trace or to explain the development of this new form of business activity. Economic and industrial circumstances in the last 10 years have focused attention on the retail distribution problem. A constant demand for greater efficiency here has brought about a tendency to specialize. At the same time, the attraction of capital and managerial ability into the retail field has produced a corresponding tendency towards large-scale enterprise. This leaves only one possible result. If the individual retail store is to specialize in products handled, it will tend to become smaller instead of larger. The manager who wants to conduct a large-scale retail enterprise must, then, have a number of stores. The present expansion in the chain field seems to be an expression of the two tendencies just mentioned.

The tendency to specialize does not, of course, prevent the existence of retail distribution centers which handle all manner and variety of products. Witness the large department stores. The field of the department store is, however, limited; seldom does it find sufficient patronage except in a "down town" locality. An individual retail business, except of the department store class, is hardly large enough to attract either considerable capital or managerial ability of the highest grade. The gross receipts of a single retail store of moderate size may be no more than $50,000 per year, while a high-caliber executive may receive as much as that in salary for directing the affairs of a large corporation. There could be no competition for his services under such circumstances.

But if a single retail store cannot furnish sufficient return on the investment of money and brains to attract them in large quantities, a group of such stores offers possibilities of greater extent. If a weakness is encountered in the lack of personal contact and individual direction, which may not be attained in the units of a chain enterprise, can it not be counterbalanced by the savings which result from volume of business, uniformity of procedure, and expert management?

Some authorities have been inclined to assume that purchase economies and reduced expense ratios alone make possible the economy of chain store operation. Fully as important may be the elimination of waste through standardized procedure, intelligent supervision, and careful check on results. The fact that the chain store enterprise can employ the capital to do things economically and the expert administrative knowledge to do them efficiently places it a long distance in advance of its ordinary individual competitor, regardless of the prices at which he buys or the expense burden at which he operates.

In concentrating attention on the chain enterprise, there is no intention to deride the accomplishments of the independent individual storekeeper. It cannot be questioned that he fills a need in the community. The neighborhood grocer, the corner druggist, offer a friendly service, a personal touch, a satisfaction of individual whims and caprices, that no chain store, run according to rule, can ever supplant. This merchant will be with us always, except as he is inefficient, slipshod, unprogressive, unaccommodating. Like the higher priced motor car, he will always find customers if his good qualities are proportionate to his charges. This book, however, is concerned with something else—perhaps to be thought of as the retail store counterpart of that ubiquitous tin vehicle whose standard characteristics and minimum cost go far to compensate for any deficiencies of elegance or individuality.

Types of Enterprise Considered.—There would seem to be a definite limit on the field to be covered by this survey expressed in its title, "Chain Store Accounting." The term ought to be amplified somewhat. While "stores" in the proper sense make up the large majority of all chain enterprises, there is no reason why a discussion of accounting for chain enterprises should be confined entirely to establishments called stores. It will be more serviceable to include all business undertakings dealing directly

with the public on a retail basis, where their activities are susceptible of administration on a group, or "chain," basis.

In other words, the broad outlines of a system of accounting for a chain enterprise may apply equally well to the concern which is selling a service as to the one selling a commodity. In some cases it is difficult to tell where the commodity stops and the service begins. There will be an endeavor here to show, for example, how many accounting principles in a chain undertaking may apply equally to a group of theaters, shoe repair shops, cleaning and pressing establishments, restaurants, etc., as well as to a chain of groceries, meat markets, bakeries, drug stores, candy shops, soda fountains, cigar stores, shoe stores, hat stores, furnishing stores, 5- and 10-cent stores, and other distributors of goods which go to make up the steadily widening field of chain endeavor.

Another impression easily gained is that the field here examined is limited to those large chain enterprises which quickly come to mind when the subject is mentioned. Quite the reverse is true. For every large and nationally or sectionally known chain enterprise, each big city supports numbers of chains of lesser size. These may consist of only three or four stores each; possibly they are not known to the public as connected or under one management. Frequently, however, they have established a local reputation and goodwill which serve them quite as well as the national prestige of their larger competitors. It is mainly with their problems and interests in mind—the concerns of the chain enterprise of small and moderate size—that the material in this book has been gathered and is here presented.

So much for the scope of this survey in the directions mentioned. But just what are the characteristics which bring an enterprise into the field here to be examined?

Primarily the chain enterprise will consist of a group of three or more establishments, selling some commodity or service direct to the retail public. Each of these establishments will in most respects be like the others in function and procedure. All of them will be operated according to a uniform central policy or plan. They will have a common management, and usually, though not always, a common ownership. Ordinarily, the purchase of goods for sale in all the establishments will be handled by a single central agency or head office. The organization will secure the advantages of purchasing in large volume and under

well-informed direction, while maintaining its contact with the public through a number of retail outlets located where the prospective buyers can most readily be reached.

One thing which distinguishes the chain store from distributing agencies not altogether unlike it—the ice wagon and the milk cart—is that each unit of the chain must stand on its own feet as an individual enterprise, earning its own profits and bearing its own expenses. Once established, the chain store has a predetermined set of conditions to work under—its location, fixed expenses, potential circle of customers, etc. These factors cannot be changed; if the store cannot accept them and make a profit, it can only be abandoned.

It is this peculiar fixity of operating conditions which gives rise to many of the needs of a chain store accounting system. The enterprise cannot be viewed merely as a whole, but must be considered as a group of single enterprises, each of which may achieve success or failure on its own account, regardless of what happens to its fellow members.

On the other hand, an equal essential for all purposes of intelligent study is the dominance of the group over the individual establishment. In general, the units of a chain are small as compared with the business of the chain as a whole. Their individual problems are simple as compared with the problems of the entire enterprise. Where this is not the case, where the complexities of operation of the single establishment become of more importance than the problems of the chain as a whole, the undertaking may be eliminated from the field to be covered here. Individual problems in such cases overshadow the group problem, and it is in the group problem that we are interested.

This would apply to such an enterprise as a chain of hotels. The matter of common ownership and common management is a minor one, and each hotel is to all intents and purposes an independent venture.

There are to be considered, then, the accounting requirements of those enterprises dealing with the retail public, through a group or "chain" of individual establishments, united by the bond of common management and uniform procedure, usually facing the same problems and performing the same functions, achieving results which may be measured for each independent of the others, but whose existence is justified through their accomplishments in total, each member subordinate to the group itself.

Types of Method Required.—Problems of chain store accounting are closely bound up with the essentials of chain store success—intelligent direction, standardization, and economy. Broadly speaking, people patronize the red-front grocery and the white-front restaurant because they know in advance what goods they will find on its shelves or its menu, and because they know its goods will be priced at a minimum figure. This uniformity in the goods offered for sale, and the economy which makes low prices possible, could not be achieved by the management without an intimate knowledge of what is transpiring in every unit of the chain.

The primary function of an accounting system for a chain store undertaking is to provide the information which will make intelligent direction of the enterprise possible. It must furnish to the management the facts of every important happening, and make it possible for the executive to regulate every detail of operations in accordance with the prevailing plan. The extent to which that information is furnished—promptly, accurately, intelligibly—is the first measure of the system's success.

The second requirement of the accounting system is that same uniformity and economy expected of every chain store activity. The accountant must take his own medicine. Coupled with the demand of chain store operation for complete and explicit data on every phase of the business is the requirement that overhead costs, of which accounting is one, be kept at a minimum fraction of gross revenues. The public appeal of the chain store is based on standardization and economy. The accounting department must contribute doubly to the furtherance of these principles—in securing maximum efficiency for every dollar it spends and in making possible maximum efficiency for every other dollar spent in the organization. Uniformity of method and procedure may be taken almost for granted; there could be no economy without it.

It is worth while to examine these requirements more closely. The chain store enterprise is competing for the trade of an individual merchant who possesses certain advantages it cannot hope to overcome. In what ways can the accounting system afford to the chain an advantage which the individual merchant, in turn, will rarely possess?

In the first place, the average retail storekeeper has little conception of what accounting can do for him, and neither time

nor inclination to pursue the subject. Often he remains in ignorance of the vital facts about his business, for lack of the illuminating glow of a comprehensive statement of his affairs and progress. If things go wrong with his business he seldom knows promptly, and often not at all, just what factor in the situation is making him trouble. The chain store should prosper through the use of complete yet simple records, subject to comparison and ready check, which will disclose immediately every tendency toward success or failure that may manifest itself in any store.

Second, the average retail storekeeper, even if provided with something approaching an ideal accounting system, will seldom keep the records properly or be able to interpret the results. He is no more apt to be an expert accountant and analyst than an expert window dresser, buyer, advertiser, auto mechanic, or real estate man. He may easily be one, but hardly all of these. The large chain store can afford the services of experts in each line; perhaps it is better to say that it cannot afford to be without them. The man whose business it is to wait on customers is free from perplexities over the intricacies of a financial statement. The customers will probably get better service and the management a better financial statement as a result.

The accounting system of a chain enterprise should operate to advantage because it can be designed by experts and administered under expert supervision. If any of the accounting data must be supplied by non-accounting employees, a form will be prepared in which the essential facts can be stated plainly with a minimum of time and effort. In the head office the information can be arranged, assimilated, summarized, and presented in the most advantageous manner. The executive will be given the facts in such form that he can readily appreciate their import and act intelligently on the situation.

The accomplishment of uniformity in a set of accounting methods for a chain of stores is usually a comparatively simple matter. From the very nature of the chain enterprise all activities tend to a standard form, repeated in each unit of the chain. In a new unit the same methods will be placed in force as have proved successful in existing units. Moreover, what the manager wants to know about one unit is what he wants to know about each and all. The facts of operation as regards store No. 1 must be gathered and presented in the same manner for store No. 21, if each is to profit from the experience of the other.

Where a chain is formed through the amalgamation of several existing independent enterprises, uniformity is sometimes more difficult of achievement. Old habits persist. New methods are not always enthusiastically welcomed. The principle of identical procedure for each link in the chain is a vital one, and weakness will exist until all records for all stores are on the same basis.

Economy in accounting methods is a matter of degree. It is governed, in part, by the extent of the information to be secured, which determines whether an accounting department shall be large or small and the accounting procedure elaborate or simple. The more data to be assembled, the more statements to be prepared, the greater will be the amount of accounting department labor and expense.

Properly speaking, this may not be a tendency away from economy. The most expensive statement may be cheap if it illuminates an opportunity or stops a leak. The thriftiest short cut may be costly if it fails to disclose an essential point. Here is a matter of nice adjustment—to secure everything that is essential and nothing that is not.

There is a real economy not related to the amount of data gathered or the extent of the information required—an economy resulting from pure and simple efficiency and ingenuity in design and operation of the accounting system. Having things done in the most economical way by the person best qualified and situated to do them, with the use of suitable forms and equipment, can bring about an aggregate saving of no mean amount. The cost of the trained accountant and the latest office devices may be prohibitive to the individual store. Spread over the tremendous volume of business which a chain enterprise can command, their services may easily pay for themselves many times.

CHAPTER II

ELEMENTS OF AN ACCOUNTING SYSTEM

The preceding chapter has discussed what is required of an accounting system in the way of conformity with the general principles of chain store operation. Methods must be standardized and economical and that they must furnish the information vital to the successful conduct of the business. But, more specifically, what are the precise functions of an accounting system in the general scheme of administration of a chain store undertaking? What duties are delegated to it, what accomplishments demanded?

Functions to be Fulfilled.—These duties and accomplishments fall rather naturally into four groups which may be said to cover roughly the functions of any accounting system. In non-technical terms these functions may be designated broadly as protective, historical, financial, and statistical. The accounting system in effect is expected to conserve resources from waste and theft, to report progress toward success or failure, to maintain a record of financial position in terms of assets and liabilities, and to make possible the accumulation and analysis of all valuable data on every phase of the enterprise. The accounting department itself will entitle these functions respectively as having to do with (1) audit and internal check, (2) the profit and loss account, (3) the balance sheet, and (4) statistical records.

It is easy to make the protective or safeguard feature of an accounting system the first consideration. In many minds the word "auditor" or "accountant" is a synonym for an individual whose efforts are devoted to disclosing peculations on the part of unworthy employees, while in point of fact he may well display far greater usefulness in other branches of accounting work. Protection is an essential feature, however, and deserves more than average prominence in a business of the sort under consideration here.

Safeguards should cover not only cash, but goods, and that more elusive commodity, services. Methods must be designed

to prevent or detect theft, and that insidious and far more damaging enemy, waste. Untold fortunes seep away yearly in breakage, spillage, shrinkage, spoilage, evaporation, obsolescence, deterioration, idleness, error, and lost motion. Proper accounting methods should constitute a mechanical watchdog against these pilferers.

On the historical side, the accounting system must tell from day to day, and week to week, how much money has been gained or lost, and how that gain or loss came about. This record of business progress is expressed usually in the natural and conventional accounting terms. On the one hand is the income which flows to the business from the sale of goods or services, and on the other hand the expenses which must be paid in securing those goods, storing and handling them, and placing them in the customers' possession. The net result is that a profit has been earned or a loss sustained, and that is what the accounting system is to report.

This report of what has happened in the business must be prompt and it must be accurate. The management must be able to compare what has happened today with what happened yesterday and the day before—last week, last month, and last year. It must have the same data for every unit in the chain, both for comparison of one unit with another and for study of the combined results and their effect on the business as a whole.

On the financial side, the accounting system must keep before the management a constant record of the position of the concern in terms of its assets, its liabilities, and its net worth. The books of account should show the value of every item of property owned and the extent of every obligation incurred. Conventional accounting principles apply here also. In the valuation of assets and the expression of liabilities the system will follow recognized principles which need no particular amplification here.

The net worth of the enterprise varies and fluctuates with its profits or losses. The statement of financial position is a corollary of the statement of profit and loss. If earnings result from the business transacted, the margin between the assets and liabilities widens and the net worth increases. If losses are sustained the reverse takes place.

On the statistical side, the accounting system has the widest latitude. The first three functions have been stated as those of

protecting property, furnishing a money record of profits and losses, and providing a statement of assets and liabilities. Beyond this the information about the business which is required may be much or little. Particulars of quantities on hand, quantities on order, rate of turnover, cost and selling price, margins of profit, volume of sales, number of customers, average sale per customer, trade fluctuations, performance of individual employees, relationship of expenses to revenues, ratios, percentages, and a host of other items may be included under the term "statistical data." What is wanted and needed along these lines the management may properly call on the accounting system to supply.

Content of the Books of Account.—The preceding paragraphs have made reference chiefly to the general functions of an accounting system. If it has been agreed what the accounting system may be expected to do, it is proper to consider what the system will consist of—what are the elements which compose it.

The general conception of an accounting system includes not much more than a set of ledgers, cash books, journals, and other books of account. If the content of these is investigated and made the basis for a statement as to the structure of the accounting system, it will be found to emphasize what has been termed the "historical function."

Probably this is not far from a correct understanding. Records are kept, in the first instance, to furnish a history of the business. Their financial feature is in a way complementary to the historical. The protective feature is chiefly a matter of audit and verification. The statistical feature is a matter of analysis and interpretation.

The records concern themselves first with *what has happened.* Financial position is largely a result of the happenings. Protective safeguards furnish verification and check on the happenings reported. Statistics and reports explain the happenings in terms of operations and point the way to changes for the better.

In what terms will the history of a chain store business be recorded? Primarily, there will be a record of the results of operation of a group of individual retail stores. These stores handle commodities to be distributed to the public. These commodities cost a certain amount and sell for a certain amount. There will be certain expenses of operating each store—wages, rent, light, heat, etc. There will be certain expenses of adminis-

tration—executive salaries, general office expenses, taxes, and the like. As a result of these elements there will be a profit or loss from operations, an increase or decrease in resources. If there is an increase, the net worth of the business will grow, except as the profits are withdrawn by the owners for other uses. If there is a decrease, the net worth of the business will shrink, except as the owners contribute additional capital.

The accounts of the business will be laid out, then, to record revenue from sales, cost of goods sold, store expenses, administration expenses, and the resultant profits or losses. So far as the elements of sales, cost of goods sold, and store expenses are concerned, there will be a separate record for each store. Administration and general expenses will be recorded in totals for the chain as a whole, although they may later be apportioned by stores if the management so desires.

If the chain is selling a service rather than a commodity, it may be impossible to distinguish operating expense from cost of goods sold. In that event the deductions from revenue will fall into one group instead of two. There is apt to be some question anyway as to just where the line is drawn between commodity cost and operating expense.

The first item to receive attention is sales revenue. This may fall into several subdivisions. If the business of the individual chain store unit is departmentalized, a separate record will be kept of the sales of each department. Another classification may be required to show separately cash sales and charge sales, with possibly a third subdivision for wholesale or warehouse sales. Sales may be divided according to clerks, although such analysis properly falls into the class of statistical data.

After the revenue item, the complicated problem of cost of goods sold will be considered. Here unquestionably the retail store encounters its greatest difficulty. The cost of goods purchased is easy to determine, but when those same goods move over store counters, rapidly and in small quantities, with almost no possibility of identification, the utmost ingenuity and perseverance on the part of the accountant are required to furnish even an approximate estimate of the cost of goods sold.

This problem can hardly be considered without reference in some detail to the entire scheme of stock handling—ordering, receiving, checking, pricing, taking inventory, and dealing with shrinkage, theft, and other losses. An accounting system which

can pass the test of adequacy in this particular is likely to have few failings in other directions.

The difference between what is paid for goods when they are bought and what is received for them when they are sold constitutes the gross margin of profit. Out of this, presumably, are to be paid the expenses of operating the enterprise. First come the expenses of the individual store; second, the general expenses of the chain as a whole. Determination of these expenses is comparatively simple. They will be subdivided in the records in such detail as the situation demands. The minor difficulties to be encountered in handling expenses are considered in a succeeding chapter.

So much for the historical aspect of the accounting records. The safeguards introduced into the system are, for the most part, a matter of internal check on the accuracy of what is set down as revenue, cost, and expense. The extent of assets and liabilities is kept track of almost as a matter of course in connection with the study of the changes taking place as a result of operations.

The actual books of account used will differ in different enterprises. There will doubtless be a set of journals and ledgers having the same general characteristics as any books of original entry and final entry. Suggestions as to the way these books are laid out, the number and kind required, and the function of each are given in succeeding chapters in connection with the accounting feature which each covers. It is possible, however, to indicate broadly at this point the records required as the skeleton of a simple set of accounts for a chain enterprise.

There will be a general ledger, in which will appear the asset, liability, and proprietorship accounts, and possibly also the operating accounts. In many cases, however, there will be a separate "store" or "operating" ledger, designed in a special way to carry details of sales, cost of goods sold, expenses, etc. The journals will include a cash receipts book, a cash disbursements book or check register, a voucher record or purchase journal, and a general journal. A small chain may get along with fewer books of account, but at least the ones mentioned above will be needed for almost all chain enterprises.

A great deal of the record keeping necessary can be accomplished through the use of standard report forms to take the place of detailed book entries. Various store reports may be

used both for presentation to executives and as supporting data for journal and cash book entries. It should be the endeavor to eliminate repetition of accounting information by consolidating and summarizing all the data before entry in the books of account.

Lists of the accounts recommended for various retail enterprises and sample forms of special journals and ledgers are included at various points in the discussion in the following pages.

Variations in Methods in Different Types of Store.—Since conditions differ greatly in chain stores of different kinds, it will be impossible to outline any single system of accounts which will meet all needs and solve all problems. Variations in procedure are suggested throughout the text, but it may be well to call attention at this point to the principal factors which necessitate changes from the simplest form of routine.

Chain enterprises differ in three respects. The first of these is the size and complexity of the business. The number of stores may run from three or four into the thousands, and the business carried on may vary from that of pure retailing to a complicated combination of manufacturing, warehousing, etc. In the second place, chain stores differ according to the commodity handled, and the list of different commodities sold is a long one. In the third place, chain enterprises will differ in degree of centralization and common ownership.

In the preceding pages the structure of the accounting system for a simple chain store enterprise has been roughly indicated. Such an undertaking will include probably a comparatively small number of stores, all situated in the same city or general locality. The accounts referred to are those which cover merely the buying and selling of goods and the basic relations existing in such a trading enterprise. Really difficult problems in such an enterprise are few, but as soon as it grows in size or complexity, the accountant meets factors requiring special treatment.

The first of these to be encountered is ordinarily connected with a central warehouse, which soon becomes a necessity for a chain of any considerable size. When goods are bought they are placed in a general storehouse instead of being delivered directly to the retail stores. Here is a new business within the old—the business of buying goods in bulk, storing them for a time, breaking them up into small lots, and eventually delivering them to the various retail outlets. The accounting system must be elaborated to take care of these transactions.

The second problem which usually confronts a chain enterprise is that which has to do with manufacturing, on a small or large scale. Regardless of the efforts of many chain store owners to stay out of the manufacturing field, in a large chain there is almost invariably found some product which, for good reason, can be manufactured more satisfactorily by the enterprise itself than purchased from an outsider. Often the manufacturing is on a small scale, but nevertheless a new accounting problem is introduced and must be met.

Manufacturing is only one of a number of possible auxiliary undertakings in which the chain may engage. Sometimes the product manufactured is sold at wholesale to other dealers as well as being marketed through the stores of the chain itself. The chain may have its own printing establishment, make up its own boxes, manufacture its own fixtures, or engage in other similar work. In each case a new accounting problem is introduced.

Another problem which sometimes arises has to do with owned real estate. If the chain owns one or more of the buildings in which its retail stores are located, it will have property taxes, insurance, building maintenance, and other problems to deal with which are not met if all locations are rented. The entire building may not be occupied by the chain store, but a portion may be sublet, which will introduce the new factor of rentals received.

Still another complication which may arise has to do with divided ownership. In some enterprises operating as a chain, part of the stores are owned by one group of interests and part by another. When that happens it is necessary to make a segregation on the general books of the net profits of every store, after all deductions. This is a problem which comes to the front after all other problems have been disposed of, but it may easily result in considerable additional accounting and bookkeeping work.

The above paragraphs indicate some of the chief causes of variation in accounting procedure which are brought about by differences in size and complexity of the business. There are also any number of variations due to differences in the commodity handled. It will be unnecessary at this point to do more than suggest briefly the characteristics of various products handled which will bring about differences in accounting treatment.

Almost every chain store has to deal with the problem of differences in the quantity sold as compared with the quantity

purchased. Goods are bought in bulk and sold in small units. The exact character of the process by which this breaking up into small units is accomplished will have considerable bearing on the accounting methods to be employed.

In certain types of chain stores there is also a change in the *form* which the goods take. As examples there may be quoted bakeries, restaurants, and soda fountains. In these establishments goods are bought in one form and sold in another. Something approaching a manufacturing process takes place.

A different sort of change in form occurs where an item of goods purchased as a unit is broken up into smaller items of differing character. The meat market problem may be taken as an example. The butcher purchases a side of beef and sells steaks, roasts, soup bones, and what not. This joint cost problem is often very perplexing. Something similar, if not apparently related, occurs when a theater chain buys a film, to be displayed on different days of the week in a dozen different show houses of varying capacity. Here the problem of allocating the cost again comes to the front.

In some lines of retailing it is possible to maintain the identity of each individual article purchased up to the time it is sold. This applies in the case of clothing, house furnishings, and the like, but not in many lines of chain store endeavor. The whole procedure of stock record keeping may be altered by this circumstance.

It is unnecessary to continue the list of variations in accounting procedure due to differences in the kind of commodity handled; the special problems of a number of representative types of chain store are discussed in Chaps. XVII and XVIII of this book. In general, however, the accounting problems of all chain stores are very much alike, and, with a few exceptions, they are discussed in connection with the one of the general phases of accounting procedure common to all such enterprises. Most differences can best be considered merely as variations from what can be laid down as basic methods suitable for practically all concerns in the field.

The fundamentals of accounting procedure are taken up in this book in what seems to be a logical order for their consideration. Revenues from cash and charge sales are discussed first. Methods of merchandise control and other problems connected with merchandise are taken up in the chapters next following.

Operating expenses and the results of subsidiary activities are next in order. Attention is then given to problems of the head office accounting department, and, in conclusion, the preparation and use of statements and statistical reports are considered.

In the discussion of each of these subjects, use is made of a number of illustrations, consisting largely of representative forms for reports and books of account. These illustrations are referred to in the text and each one is also accompanied by a brief explanatory footnote. All these forms are suggestive rather than specifically applicable to any particular case; they have been designed to illustrate the principles discussed and would be likely to require some modification in actual practice. In most of them, for example, spaces would have to be provided for the signature and approval of various employees and officials who would handle them in their course through the organization. The manner in which this feature would be dealt with is dependent on the organization of the individual enterprise.

Discussion of the handling of various types of transaction is also illustrated by means of skeleton journal entries, which appear in the concluding paragraphs of most of the chapters. These journal entries are designed to express in bookkeeping terms the effect of various occurrences which take place in a chain store business. The text material as a whole will be of interest to managers as well as accounting department employees, while these journal entries illustrate specifically the method of giving effect to the results of operation disclosed by the accounting data collected, and will, accordingly, concern primarily the bookkeepers and other members of the head office accounting staff.

CHAPTER III

HANDLING THE CASH

There has now been given a brief outline of the general characteristics and requirements of an accounting system for a chain of stores. In this chapter and those next following there are discussed the individual elements of the historical record which has been said to constitute the principal feature of a set of accounts. These elements are taken up in substantially the same order in which they are normally given consideration by the analyst of the results of business operations.

First in such consideration, and usually of primary import in the eyes of an executive, are two items which usually run along side by side—revenue and cash. Revenue is the life blood of the enterprise. Since its volume regulates the potential achievements of the business, it becomes the measuring rod by which all other elements are compared. "How much did we take in?" is the first and fundamental question that is raised by the management of every retail store.

Relation of Cash and Revenues.—Revenue in a retail store means sales. Goods must be transferred from ownership by the store to ownership by the customer before a profit in the ordinary sense can be realized. A sale means money coming into the cash drawer—immediately, if the business is conducted for cash; very soon even where charge accounts are carried. Since for one reason or another the great bulk of chain store business is done on a strictly cash basis, the problem of handling sales resolves itself quickly into the problem of handling the cash. In most chain stores "sales" and "cash taken in" come very close to the same thing.

It is somewhat simpler to treat this problem as that of handling the cash rather than as merely that of recording sales. Handling the cash involves several things in addition to accomplishing and recording a sale. The physical handling of the money which passes through the store is something of a problem in itself. Perhaps the physical handling of cash may be said to constitute

one-half of the problem, while record keeping and analysis make up the other half.

Cash, in the sense of currency, bills, etc., finds only a temporary resting place in a retail store. It is generally the aim of the management to get this extremely liquid and somewhat troublesome asset converted into bank credit as quickly as possible. If actual handling of the cash could be reduced to placing every coin received in a locked box and transporting the entire sum intact to the coffers of the nearest bank at the close of the day's business, there would be less to consider in the treatment of this subject.

As a matter of fact, there are usually a number of circumstances which interfere with this simple procedure. In the first place, the store must "make change" for customers and must, accordingly, carry a change fund of some sort to accommodate this need. Frequently, too, it becomes necessary to pay in currency sundry small items of expense, which it would be impractical to attempt to handle through the ordinary medium of a formal invoice and check in payment. The sum received for the day's sales may, accordingly, be reduced or impaired before it reaches the bank. Moreover, if the store carries any charge accounts with customers, an added complication is introduced. A portion of the day's sales will not be realized that day in cash, while a portion of the cash received may represent sales of a preceding day.

Moreover—and it is this fact which differentiates the chain store from many other retail establishments—the owner or manager is not present in person to see that proper disposition is made of the money which flows in over the store counters during the hours of each business day. He must safeguard himself against a variety of difficulties which come into being as a result of the oft-mentioned "human element." The problem of safeguarding the revenue becomes such a large one in many enterprises that in some instances the attention of the accounting department becomes concentrated on it almost to the exclusion of every other feature. In most well-managed establishments, reasonably satisfactory methods have been installed to accomplish protection of money handled in the stores, and it will suffice to mention these somewhat briefly here.

Mechanical Safeguard Devices.—The sources of loss in connection with handling cash fall into four classes, against each of

which a separate set of precautions needs to be taken. The first is the possibility of customers leaving the store without paying for purchases. The second is misappropriation by the clerk handling the money. The third is clerical error—mistakes in pricing, adding up items, making change, etc. The fourth is disappearance of funds between the store cash drawer and the bank vault.

Almost all of the safeguards imposed on the physical handling of the cash are in the form of what is termed "internal" or "double" check. In ninety-nine cases out of a hundred this is accomplished wholly or in part by one of the various mechanical recording devices, most commonly termed "cash registers." The register may be operated by the clerk who receives the cash and checked periodically by some outside party, or the register may be operated by the salesman and the money received by a cashier, who thus furnishes half of the double check.

The operation of the cash register is pretty generally understood by almost everyone having to do with retail stores. It has come into such universal use as to be considered an indispensable part of store equipment. From the safeguard standpoint alone the register has two functions; one is to provide an unimpeachable record of the revenues recorded as received during a given period, and the other is to furnish a comparatively safe and orderly receptacle for the currency temporarily or permanently held in the store. The numerous other functions performed by the cash register are in the nature of record keeping and are discussed in the latter part of this chapter rather than at this point.

In a small store one cash register may serve for all clerks. Often each clerk has a separate drawer in the register for his cash. Often, too, the register carries a separate dial for recording the sales of each clerk. In this way responsibility is fixed on the individual. In a larger store there may be a separate register for each department. This may or may not do away with the necessity for divisions within the register.

Where a separate cashier is employed, the customary procedure is to provide the sales counters with a recording device of some sort which issues a ticket showing the amount to be paid and at the same time adds this amount to the previous total of sales for the day. The customer carries the ticket to the cashier, who is responsible for having in the drawer at the end of a day an amount which corresponds with the revenue reported by the

recording device from which the tickets are issued. In some cases the clerk merely writes a sales slip and the cashier has both register and cash drawer. This arrangement offers protection against errors by clerks in pricing but fails to afford the same double check on the cash which is accomplished by the first mentioned method.

Other Safeguard Methods.—Mechanical devices alone ordinarily cannot furnish protection against all the possible sources of loss. The first such source mentioned was the possibility of customers leaving the store without paying for their purchases. The physical layout of the store may be so arranged as to afford maximum protection against such losses. Where a separate cashier is employed, he is usually stationed near the door through which customers leave, or in such a position as to command a good view of the exit. Watchfulness is also required of the clerks. Even better protection has been accomplished in some of the "self-serve" stores, where it is practically impossible for a customer to leave the store without making payment to the cashier. An excellent combination of such safeguards with double check on employees has been devised by one chain enterprise and is referred to a little later in this chapter.

Protection against theft by employees is afforded by the separate cashier system, and also in part by the use of the ordinary type of cash register. On these registers the amount recorded as received is displayed prominently so that the customer may notice if the clerk rings up an incorrect amount. In those not rare cases where collusion exists between the clerk and the customer, it is practically impossible to prevent or detect the peculation by the ordinary methods of cash protection. This practice, ordinarily termed "short-checking," can be brought to light only through some adequate scheme of merchandise control. This phase of the subject is discussed in some detail in Chaps. V, VI, VII, and VIII.

About the only protection against error on the part of the clerks is insistence on care in handling each sale. Many stores have apparently minor "rule-of-thumb" methods on which they insist and which in the aggregate accomplish considerable savings. One of these is the rule that cash must be rung up on the register before goods are wrapped. Another is the simple expedient of listing on scratch paper the individual amounts payable, where a number of items are bought together, and then counting the

items to see that the number corresponds with the number of amounts on the list. Where goods are incorrectly priced, there is little chance of catching the error except by the use of sales slips on which the article is adequately described. These slips must be audited, either by a cashier in the store at the time payment is made, or by the general auditing department at a later date.

Once the total cash to be accounted for is determined and found on hand in the cash drawer, the worst of the difficulty from a safeguard standpoint is overcome. There remains, however, the problem of transporting the cash to the bank without loss or error. In large cities where burglaries and hold-ups are not uncommon, the greatest precaution must also be exercised at this point. There may be a commentary on the stage of our civilization in the semi-armored truck which is used in a good many places to carry funds from store to bank.

The bank deposit may be made by the store manager himself, and a notification of the amount sent from the bank to the head office of the chain. This amount, of course, must tally with the total shown by the daily cash report of the store. In some cases the bank will have its messenger call at the store and receive a sealed bag containing the deposit. Where the chain of stores is comparatively small and concentrated in one locality, a collector from the head office may call at each store and verify the amount of the receipts before leaving. In such case a single deposit is made by the head office when collections from all the stores are in.

Cash Records for Safeguard Purposes.—In the above paragraphs it has been the aim to show the responsibilities of the accounting system from the standpoint of the physical safeguarding of the cash handled. The other half of the problem, as previously mentioned, has to do with the keeping of such cash records as are necessary to a proper portrayal in the books of account of that portion of the business history to be gained from this source. The function of these records is really threefold—first, to strengthen and amplify the mechanical safeguards in effect; second, to provide a vital portion of the profit and loss and other general bookkeeping data; and third, to furnish much of the statistical information on which the management must rely in formulating its plans and policies.

The safeguard element in the record keeping has already been touched on in the references to cash registers and sales slips. A

record of all the various register readings must necessarily be kept in each store; this will be checked by the head office periodically. Each store will make a daily report in which the element of internal check will be combined with bookkeeping and statistical information. This is shown in illustrations which are referred to below.

It has been assumed in the discussion that cash received in the store will be deposited intact, or at least according to some definite plan which will leave on hand a change fund of fixed amount. This so-called "imprest system" is a vital feature of any good safeguard plan. Each store is supplied originally with a fund of such amount as may be necessary to make change during the early hours of the day, before the cash receipts have accumulated to any considerable extent. That same amount is retained in the cash drawer from day to day. All cash received, net, is deposited in bank daily. For the elimination of error, inaccuracy, misunderstanding, and confusion in the head office, this simple device has no equal.

A double record of cash receipts may be kept by the employment of two registering devices in the hands of two different employees, and one record may be used to check the other. One of the self-serve grocery chains utilizes a special form of adding machine with a double tape, the under sheet being a carbon of the upper one. The individual items making up each customer's purchase are rung up on this machine and totaled. The upper tape is then torn off and handed to the customer, who takes it to the cashier as evidence of the amount to be paid; the lower tape, showing all the items and the total, remains in the machine. The cashier rings up each sale on a regular cash register, whose total at the end of the day must correspond with the total of all the individual tape slips, as taken from the carbon-copy tape removed from the adding machine. This method is referred to here as providing an excellent double check, although perhaps its greatest recommendation is the volume of statistical information which it supplies, a feature referred to in a subsequent section.

Where sales slips are utilized, an audit of these slips by the store cashier or by the head office auditing department furnishes an additional check on the activities of the sales clerks. It is doubtful whether this sort of a post-mortem examination into a day's occurrences in a given store would alone justify the use of the

sales slip, if it were not for its other advantages, which are also mentioned in more detail elsewhere in this book.

Where charge accounts are carried, a wholly new problem in internal check is introduced. This subject is considered fully in Chap. IV and is, therefore, passed without further comment at this point. The control furnished by proper merchandise records is also fully as important as that on the cash itself, as noted in a subsequent chapter.

Cash Records for Bookkeeping Information.—The second purpose of the records is to provide the head office bookkeeping department with the data necessary for proper entry in the books of account of the transactions taking place in the store during a given period. So far as cash is concerned, the first item which interests the management is the amount of revenue realized. In the report which each store must make daily to the head office, the determination of the amount and kind of sales will be the important factor.

If there be assumed an enterprise where all the sales are of one kind, all are made for cash, and all cash is deposited intact in the bank at the end of a day, the store's daily report will be a very simple affair, showing a single amount. This amount represents the sales of the day and the increase in the cash resources of the enterprise. If, however, the sales are of different kinds and the head office desires to learn something further regarding them, this report must be supplemented by some analysis.

A very rough analysis by departments may be secured through the use of a separate cash register in each department, or a single somewhat elaborate register with separate dials for various departments or commodities. The amount of information which can be accumulated by an elaborate cash register is almost unlimited, but as most of it is of a statistical character, its consideration is postponed to a later chapter. Practically the only obtainable detailed analysis of sales by items, however, is that secured through the use of a sales slip for each customer, this slip containing all the pertinent facts regarding the transaction.

There is nothing complicated about the sales slip itself; its form is familiar to everyone. The amount of detail given on the slip depends entirely on the requirements of the head office and the feasibility of taking up the clerk's (and also the customer's) time with the recording of this information. In stores of certain types—clothing stores, for example—where a single purchase is

often a comparatively large one and a detailed analysis of goods sold is required, a sales slip completely filled out is often used. In many types of chain enterprise, however, the sales slip for cash sales is rightly considered an impractical, if not a wholly superfluous, record.

BLANK STORES COMPANY
DAILY CASH REPORT
STORE No. ______

Day of Week ____________________ Date ______________ 19__
Register Readings:
  Final Reading Today . . . . $________
  Final Reading Yesterday . . . . ________
Amount Rung Up Today . . . . $________
Deduct: Amounts Rung Up in Error, etc . . . . ________
Actual Cash Receipts for Day . . . . $________
Cash Deposited (or Given to Collector) . . . . ________
Balance—Over or Short . . . . $________

Signature of Collector ____________________ Signature of Store Manager ____________________

Audited____ Deposit O.K.____ Approved____ Entered on Summary____

FIG. 1.—Daily Cash Report.

In the above illustration is shown a very simple form of daily cash report. It is assumed that the store cash fund is carried on the imprest system and that all cash taken in is deposited intact, or turned over to the collector from the head office. The form will be filled out by the store manager and will be signed also by the collector. Spaces are also provided for approval of various head office clerks and officials. Daily report forms for use where there are more complications to be dealt with are shown in Figs. 2, 3, and 9.

Where no sales slips are used, and where all receipts are deposited intact, the daily cash report of the store is a brief and simple affair, such as is illustrated in Fig. 1. As soon as the handling of cash in the store involves any variation from the deposit intact of all receipts, the report to the head office becomes a somewhat more complicated record. If, for example, any cash is disbursed by the store manager, the amount must be reported and the purpose of the expenditure indicated. A store manager may be authorized to make refunds for returned merchandise, defective goods, overcharge, etc. He may also have authority to pay petty expenses out of his receipts. In some cases even such as important item as employees' wages is paid out of the cash

drawer. It is obviously essential that such disbursements be detailed fully in the report to the head office.

Reference has already been made to the advantages of the imprest system. Where this system is in effect, the daily report need contain no reference to the balance of cash on hand. It is

BLANK STORES COMPANY
DAILY CASH REPORT
STORE NO. _____

Day of Week____________________ Date______________19___

Register Readings at Close of Business:	*Amounts*	*Totals*
Today	$______	
Yesterday	______	
Amount Rung Up Today		$______
Deduct: Errors in Ringing Up Sales, etc.		______
Actual Cash Receipts Today		$______
Deduct: Cash Paid Out (as per details below)		
. . . .	$______	
. . . .	______	
. . . .	______	
Total Cash Paid Out		$______
Net Increase in Cash		______
Add: Cash Balance Carried Forward from Yesterday		______
Total Cash Available		$______
Deduct: Cash Balance Retained for Use Tomorrow		______
Net Cash Deposited in Bank		$______

Store Manager's Signature________________________

FIG. 2.—Daily Cash Report (Alternative Form).

The purpose of the form illustrated above is similar to that of the report shown in Fig. 1. In this form, however, spaces are provided for reporting any petty expenses paid out in cash from the day's receipts. In addition, it is assumed that, instead of a cash fund of fixed amount being carried in the store, the manager is permitted to retain whatever amount he requires, depositing only the balance of the receipts. Another difference is that in this form no space is provided for recording cash overages or shortages, it being assumed that the store manager is obliged to make these good. Space is provided for the manager's signature, but in this illustration no spaces have been set aside for formal approval by the head office.

understood without question that after each deposit is made the store retains in its cash drawer the amount of the fixed fund. That policy might be followed even where the manager was permitted to pay small expense items out of the day's receipts;

the form in Fig. 1 could be elaborated to show the petty expenditures. Provision is made for such expenditures in Fig. 2, in which may also be reported a fluctuating store cash fund, used in cases where the imprest system is not followed but the store manager is permitted to retain whatever cash he expects to require for the day's business. No provision is made in either of these forms for the handling of charge accounts, the discussion of that feature being postponed to the next chapter.

In Fig. 2 blank lines have been left for description of expenditures or disbursements. The store manager or cashier, in preparing the report, should describe fully the nature of each amount paid out, and should preferably submit with the report a voucher covering the disbursement—that is, a receipt from the party to whom the cash was paid, an invoice, or something similar. With full information at his disposal the head office bookkeeper can determine the account to which the expense will be charged and also verify the propriety of the payment.

In some systems the store is reimbursed specifically for its petty expenditures by means of a general office check; in such cases, of course, the expense items would not appear in the form illustrated, but would be shown separately in the report and handled independent of cash receipts, as illustrated in Fig. 3.

Where the head office collector calls at the store, the amount of money taken up by him can be proved with the amount shown on the report before he leaves the store. In such cases the form is often printed on the face of an envelope in which the cash is turned over to the collector. If deposit is made directly in the bank by the store manager, the bank should notify the head office of the amount received and this advice of credit should be checked against the store report by the head office auditor.

Cash Records to Supply Statistical Data.—In a large chain organization, or one in which a considerable volume of statistical information is desired, this daily store report will contain more than the simple facts called for on the two forms just discussed. Practically all the statistical information connected with sales, performance of employees, and relations with the public must be furnished in these daily store reports if it is to be furnished at all. Loath as the average executive is to burden the store personnel with the accumulation of statistics when every minute is required for the satisfaction of his customers' needs, the fleeting facts of store operation must be seized and recorded

at once if they are not to be lost for all time. There are indicated below some of the more commonly required items of information which must be put on record in connection with store operation and handling the cash, if they are to be secured at all.

The first of these has to do with the products sold—their nature, the quantity of each, and possibly the fluctuating or seasonal demand. The individual sales slip previously mentioned is about the only means of securing a prompt, complete, and accurate analysis of sales by products. In some cases where the management desires information as to particular products, but is unwilling to take the time and incur the expense necessary for a complete analysis, sales slips are used for certain articles only, or in certain departments alone, or merely to make tests during certain days or weeks. This is a compromise or modified adaptation of the sales slip method.

A second possibility of sales analysis has already been referred to. This is the analysis secured by the use of an elaborate form of cash register or other recording device. The adding machine referred to on page 22 may, for example, be furnished with symbols for various articles and analysis of the retained tape will supply much valuable information.

Where sales analysis is not secured in the store, approximations can sometimes be attained by the use of purchase records and periodic inventories. Roughly speaking, the amount bought less the amount on hand represents the amount sold. Where the management will content itself with information of such a nature, the store operatives may be relieved from any obligation to furnish data along this line.

The second class of statistical information to be secured from the store has to do with the customers. In many cases the number of customers alone is required. The management may desire to know, however, whether these customers are men or women, at what hours of the day they buy, and so on. The steps necessary for obtaining this information are obvious.

The third class of statistical data has to do with the performance of clerks. Some stores lay great stress on this point. Often cash registers are supplied with a separate dial for each clerk, so that his performance may be known. Where still further analysis is wanted, the sales slip again must be utilized. Each clerk will have his own book of slips and the general auditing department, by sorting and analyzing these

slips, can later determine accurately what use each clerk is making of his time in the store.

Further consideration of the use of statistical information is given in a later chapter of this book. Figure 3 represents a fairly

BLANK STORES COMPANY

DAILY REPORT OF BUSINESS

STORE No.________

Day of Week Date

SALES

Name of Clerk	Hours on Duty	Customers Served	Cash Register Readings	Net Cash Rung Up	Adjustments	Cash for Deposit
			T			
			Y			
			T			
			Y			
			T			
			Y			
			T			
			Y			
Totals for Day						

CASH PAID OUT (to be reimbursed by head office each week)	
Total Paid Out as Previously Reported	
Less: Amount Refunded by Head Office Today	
Net Carried Forward	
Paid Out Today (detail below)	
Total for Day	
Total Now Due from Head Office	

GOODS RECEIVED (as per detailed reports attached)		
From Warehouse Store Orders Nos.	From Other Stores Transfer Slips Nos.	From Vendors Receiving Reports Nos.

Weather Other Trade Conditions

Remarks

Signature of Store Manager

Fig. 3.—Daily Report of Business.

This form is an elaboration of those shown in Figs. 1 and 2. It provides for reporting sales by clerks, the assumption being that a cash register with separate dials for each clerk is in use. It is assumed also that all cash collections are deposited intact. The petty cash fund is carried strictly on the imprest system; amounts paid out are reported on this form and refunded from time to time by the head office. In the space headed "Goods Received" may be entered the serial numbers of receiving reports sent in to the head office accompanying this form.

elaborate daily store report form, on which can be incorporated a considerable number of the items for which the head office must look direct to the store manager for information. Where sales slips are utilized for all purchases, such additional information as

is required will be secured through analysis of these slips in the head office. The store personnel will be required only to record the information, and not to attempt to compile or analyze it.

Head Office Cash Records.—The records to be kept by the head office bookkeeper in connection with handling cash received are usually comparatively simple. From a purely bookkeeping standpoint the chief requisite is some form of journal in which may be accumulated for each store the total cash receipts, bank deposits, etc., by accounting periods. The form of this journal will vary with the system in effect and with the complexity of the business.

BLANK STORES COMPANY

CASH RECEIPTS BOOK

Page Number

Date	Particulars	Post Ref.	Bank	Cash Adjustments		Sales of Retail Stores						Sundry Cash Receipts	
			Deposits	Short	Over	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Description	Amount
			Dr.	Dr.	Cr.	Cr.	Cr.	Cr.	Cr.	Cr.	Cr.		Cr.

FIG. 4.—Cash Receipts Book.

The columnar record here illustrated will be used in the head office for recording the cash receipts of all the stores in a small chain. Entries in this form will be made from daily cash reports similar to that illustrated in Fig. 1, the columns provided corresponding with the items shown on that report. The last two columns on the right-hand side are used for miscellaneous cash receipts which do not come through the retail stores.

For the very simple type of chain enterprise with a few members and a limited volume of transactions there may be kept only one journal for all transactions—cash receipts, cash disbursements, purchases, sales, etc. An example of this type of "cash journal" is shown as Fig. 38 on page 149. In the larger enterprise, however, it will generally prove desirable to employ a separate journal record for cash receipts alone, or at least for cash receipts and those cash deductions covered by the ordinary daily store report.

This record may have a separate page for each store, the totals being carried into a summary cash receipts book, or may be designed to show the receipts of all stores on a single page. The latter form may be most readily employed where there are comparatively few units in the chain, where all cash received is deposited intact in one bank, and where there are no deductions or other complications to be met. In Fig. 4 is shown an example

of such a form, the illustration presenting a single page from a journal. The only deduction provided for is "Cash Short or

BLANK STORES COMPANY
SUMMARY OF DAILY CASH REPORTS
STORE NO. ____________
Period Ending ____________

Day	Total Cash Receipts from Sales	Cash Paid Out				Net Increase in Store Cash	Remarks
		Wages	Supplies				
	Cr.	Dr.	Dr.	Dr.	Dr.	Dr.	
Total							

FIG. 5.—Summary of Daily Cash Reports.

In a chain enterprise which includes a large number of store units, it may not be possible to carry all the details from the daily store reports directly on to a single cash receipts book, because of space limitations in the form. Under such circumstances it may be desirable first to recapitulate the store reports on a form similar to that illustrated above. The columns here provided are for summarizing information such as will be shown in Fig. 2. This form does not show the cash deposited but merely the receipts, payments, and net increase in cash. Amounts taken from the store cash fund for deposit will be handled in a general cash receipts book like that shown in Fig. 6.

BLANK STORES COMPANY
GENERAL CASH RECEIPTS BOOK
Page Number

Date	Particulars	Bank Deposit	Withdrawn from Store Cash for Deposit									Sundry Cash Receipts	
			No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	Description	Amount
		Dr.	Cr.	Cr.	Cr.	Cr.	Cr.	Cr.	Cr.	Cr.	Cr.		Cr.

FIG. 6.—General Cash Receipts Book.

This form is somewhat similar to that given in Fig. 4, except that the amounts credited to the retail stores do not represent net cash sales for the day, but show simply the amount taken from the store cash fund for deposit. It is assumed that the store is permitted to keep a fluctuating cash balance from day to day, and that this form will be used in conjunction with a daily report like that shown in Fig. 2 and a summary of those reports such as is illustrated in Fig. 5. Two columns at the right-hand side are also provided for miscellaneous cash receipts not passing through the stores.

Over" which, under the circumstances assumed, would be carried into the ledger as an expense (or income) item.

Where the number of stores is large and where the daily report is a more complex affair, it will generally be found more satisfactory to accumulate the data on some sort of summary sheet, such as is shown in Fig. 5. On this form the store reports will be recapitulated by weeks, by months, or by four-week periods, depending on the basic accounting period adopted by the enterprise. In connection with a summary of this kind a further record, such as is shown in Fig. 6, will be employed for entering information as to bank deposits, Fig. 5 showing only particulars as to cash received. The ledger entries resulting when two such

BLANK STORES COMPANY

SUMMARY OF DAILY CASH REPORTS

STORE No.__________

Period Ending______________

Day	Clerk A			Clerk B			Clerk C			Clerk D			Store Total		
	Hours	No. Cust.	Sales	Hours	No. Cust.	Sales	Hours	No. Cust.	Sales	Hours	No. Cust.	Sales	Hours	No. Cust.	Sales
Total															

FIG. 7.—Summary of Daily Cash Reports.

This form may be used for recapitulating store reports of the type illustrated in Fig. 3. Provision is made for recording and summarizing not only the amount of the sales, but also the number of customers waited on and the number of hours worked by each sales clerk. The "Total" column at the right-hand side will show the total cash sales of the store for the month, while the remaining columns provide statistical information. It is presumed that the "Total Cash Sales" figure will be carried into a general cash receipts book of appropriate form, its rulings probably being on the general order of those shown in Fig. 4.

records are used are indicated in the concluding paragraphs of this chapter. Another form of summary, which includes certain statistical data also, is illustrated in Fig. 7.

The records just mentioned deal only with cash received, bank deposits, and such payments as are made in currency out of store cash receipts. The treatment of cash disbursed is ignored at this point on the assumption that all disbursements (other than the petty expenditures referred to) will be made by check and handled through another journal record, known as a "cash disbursements book" or a "check register."

It is the habit of many bookkeepers to record cash receipts and cash disbursements in the same book. There is no objection to

this procedure, and it has many advantages when the volume of individual items to be handled is not so great as to make their treatment through a single record a clumsy affair. The nature of a chain enterprise, however, is such as to introduce into the general bookkeeping a large number of comparatively small items, necessitating at the best a very considerable number of classifications and groups. For this reason it is often advisable to adopt certain preliminary recapitulation and summary forms by means of which information may be grouped and accumulated so that it may find its way into the general books of account satisfactorily condensed and susceptible of easy handling by the bookkeeping force.

Additional cash records are required where any considerable number of bank accounts are carried. In many chain enterprises each store makes deposits in a bank of its own and money is later transferred to the general bank accounts before being disbursed in payment of bills, etc. Suggested forms and procedure for handling the problems which arise under such circumstances are given in Fig. 11 and in connection with Chap. XI, where attention is also given to the various methods of keeping track of available bank balances, outstanding checks, and items of like character.

Bookkeeping Entries.—The final resting place of the information accumulated through the methods just discussed is in the general ledger. All postings in the general ledger will originate in a journal of one sort or another and may be expressed in "journal entry" form. For the guidance of the bookkeeping staff, an attempt is made in each of these chapters to set out in conclusion the skeleton journal entries which will result from recording the data gathered by the means suggested. Obviously, these entries will not appear in any general journal exactly as indicated here, but their effect will be that of a general journal entry of the character shown.

Those familiar with any sort of bookkeeping will realize that in an enterprise consisting of many units, each of which has many transactions every day, it would not be feasible to make a separate entry for each transaction. The first requirement is that the information regarding cash sales, bank deposits, etc., be summarized and condensed before it is entered in the general ledger. For the purpose of summarizing and condensing the data, columnar journals (such as have been illustrated) are used.

Entries in the ledger will be made at the end of the month, or other accounting period, and will consist of the totals taken from these summarizing journals.

Where the imprest system is in effect, where all cash received represents cash sales and is deposited intact, the entry at the end of the month will be simply:

Dr. Cash in Bank	$xxxx	
Cr. Cash Sales—Store No. 1		$xxxx
Cash Sales—Store No. 2		xxxx
Cash Sales—Store No. 3		xxxx
etc.		

This is the sort of entry which would be taken from the journal illustrated in Fig. 4; there might, of course, be some additional credits to the accounts designated in the "Sundry Cash Receipts" column.

Where petty expenses are paid in each store out of the day's receipts, a part of the debit side of the entry will be to expenses instead of to cash in bank, the entry at the end of the month having the following form:

Dr. Cash in Bank	$xxxx	
Expenses—Store No. 1 (in detail)	xxxx	
Expenses—Store No. 2 (in detail)	xxxx	
Expenses—Store No. 3 (in detail)	xxxx	
etc.		
Cr. Cash Sales—Store No. 1		$xxxx
Cash Sales—Store No. 2		xxxx
Cash Sales—Store No. 3		xxxx
etc.		

Where the imprest system is not in effect and each store is permitted to retain whatever cash it requires, two sets of entries are needed to record the results. The first of these will be the entry coming from the summary of daily reports, such as are illustrated in Fig. 5, and will have the following form:

Dr. Cash on Hand—Store No. 1	$xxxx	
Expenses (Wages)—Store No. 1	xxxx	
Expenses (Supplies)—Store No. 1	xxxx	
etc.		
Cr. Cash Sales—Store No. 1		$xxxx

The second entry will come from the general cash receipts book, illustrated in Fig. 6, and will have the following form:

Dr. Cash in Bank	$xxxx	
Cr. Cash on Hand—Store No. 1		$xxxx
Cash on Hand—Store No. 2		xxxx
Cash on Hand—Store No. 3		xxxx
etc.		

The difference between the amounts charged and credited to the "Cash on Hand" accounts represents the cash balance remaining in the various retail stores. A separate ledger account will be required to show this balance, which will fluctuate from day to day. This situation differs from that where the store funds are carried on the imprest system. In that case there is no change in the balance from day to day and no entries in the store cash account are necessary, the net receipts going direct into the bank as a deposit.

Varying arrangements of the journals and summaries will, of course, result in varying forms of journal entry, but the net effect in every case will be substantially the same. Further reference to this subject and to the general handling of the cash receipts and disbursements records in the head office is made in Chap. XI.

CHAPTER IV

CHARGE ACCOUNTS

Most chain stores do business on a strictly cash basis. The reason for this is obvious. Where credit is extended to customers for periods of a week, a month, or even longer, the business must carry increased expense, in addition to having a greater amount of capital tied up. Since the basis of chain store success is reduction of expense and rapid turnover of capital, the tendency is to curtail every activity which increases the one or reduces the other.

Notwithstanding this general truth, there are a number of chain enterprises now in existence which find it profitable to extend credit, and there will doubtless always be frequent occasions when chain store managers will have to wrestle with the problem of handling charge accounts. Such a feature in a chain store enterprise is anything but welcome to the accountant, since it introduces bookkeeping complications which are out of all proportion to the fundamental importance of these accounts from a historical or statistical standpoint.

The amount of routine bookkeeping work is so great and the handling of the records so troublesome that in the individual retail store the problem has tended to overshadow all the other bookkeeping work—so much so that many storekeepers, when the words "accounting" or "accounts" are mentioned, think only of charge accounts with customers. The misfortune of this attitude is that the real basic accounting, which has to do with profits and losses, financial position, etc., is completely lost sight of in the harassment of keeping an accurate record of transactions with charge customers.

Methods of Recording Charge Sales.—Examined in connection with the previous statements relative to the elements of an accounting system, the problem of charge accounts reveals itself as one of revenue in a postponed form. When merchandise is delivered from the store to the customer, the revenue-creating transaction has taken place. Instead, however, of this transac-

tion resulting in an immediate inflow of cash, there is created a claim or charge against the customer which will not be realized in cash until some later date. An intermediate step is introduced between the revenue transaction and the receipt of cash.

In some cases the charge account against a customer may be a temporary and exceptional affair of a very informal nature. A customer may make a purchase and for some reason postpone payment until the following day. There is, say, no definite understanding as to the extension of credit, but the store provides temporary accommodation. In such a case the intermediate step is hardly of sufficient importance to justify any pronounced change in the bookkeeping system. The simplest and easiest method of treatment, where such transactions are few and involve small amounts, is to prepare a memorandum debit (or charge), ring up the sale like a regular cash sale, and place the slip in the drawer exactly as though it were cash. When the customer calls and pays the account, no amount will be rung up in the register but the currency will be substituted in the cash drawer for the memorandum, which may then be destroyed.

It is apparent that this method is limited in application. If there are many customers and charges are frequent, confusion will result and the cash position of the store will be misstated. Where the extension of credit is a regular feature of the business and payments are made weekly, semi-monthly, or monthly, a more elaborate machinery is required to deal with the problem.

In such a situation the accountant is confronted with the necessity of accomplishing several results through the methods installed. The first requisite is an accurate record of the individual accounts against the customers. The second need is information as to the total of charge sales made each day; this is often a difficult thing to secure after other phases of the problem have been dealt with satisfactorily. A third requirement is an adequate control account which will show in total the amounts charged to customers, the amounts paid by them, and the aggregate balance outstanding. As a fourth feature the accountant must provide the proper safeguards against error, bad debts, and other losses.

The keeping of the individual account against each customer is not a matter of great difficulty, except as taken in conjunction with the problem of securing total sales and maintaining a control

account. Provision must be made for recording in the account charges to the customer for all goods sold him, credits for cash received from him, and also such other charges and credits as result from omissions, errors, allowances, etc. In addition, it is usually considered essential that some prompt and simple method of preparing a periodic statement of account be incorporated in the system.

BLANK STORES COMPANY
STORE NO. 14
1366 American Avenue
Phone: Main 423

Name ______________________

Address ______________________

Quant.	Item	Price	Amount	
Total This Slip				
Total Previous Purchases				
Total Account to Date				

BOOK AND SLIP NUMBER	Name of Buyer ______________ Date ______________

Fig. 8.—Sales Slip.

The sales slip form illustrated above may be used for customers having charge accounts. Either two or three copies of the slip will be made, depending on the accounting methods used. The form provides for showing both the total of the individual slip and also the cumulative total of all purchases to date.

In practically every case a sales slip, showing in detail the purchases made, is an essential part of the system. The sales slips used for charge customers are of many forms, a typical one being illustrated in Fig. 8. Slips of the same or slightly different character may be used for corrections and adjustments; sometimes a slip of the same form, but printed in a different color, is used. Obviously, if sales slips are used for both cash and

charge sales, they must be different in form or color so as to avoid confusion.

Accumulating the Charges.—In most manufacturing and large trading organizations the account itself is carried in a ledger and the amount of each charge and credit is entered in a page for the customer concerned. In retail stores, however, the favored method is to avoid such "posting" in so far as possible by making a copy of the sales slip serve as a record of the account. Each slip is prepared in duplicate, the customer receiving one copy and the store retaining the other. What such a record lacks in completeness it makes up in simplicity and economy of handling.

It is, of course, necessary that the charges against a customer be accumulated in some manner so that their total can be known. One means of accomplishing this is the so-called "running balance" method. The total of each sales slip is carried forward on to the next slip for the same customer; thus the last slip of a series bears the total charge for the period. This may be accomplished by filing the slips in "jackets" in a file or prepared pockets in a wooden or metal cabinet. There are a number of patented systems involving this principle, prepared filing cabinets being sold as a part of the system. As each slip is filed, the total of the last previous slip is carried forward and added to the current slip total. The same end is achieved by keeping a separate sales slip book for each customer and leaving the duplicate slip in the book, which constitutes a file jacket in itself.

The outstanding advantage of this method of carrying accounts is that the balance due from the customer is quickly available at any time. Where the previous total is entered on both copies of the sales slip, the customer as well as the storekeeper is notified with each purchase as to the total of his account to date. The preparation of a periodic statement is made unnecessary and a great amount of clerical labor thus eliminated.

The disadvantage is that the total of charge sales for each day is very difficult to determine, unless the system is revised or amplified in some respect. Particularly is this true where an attempt is made to carry the running balance on both copies of the sales slip. Misunderstandings and errors are likely to occur also if several purchases are made on the same day and the customer decides to pay the account before these slips have all been filed.

Another method, involving somewhat more clerical labor but eliminating in part the objections just mentioned, may be termed

the "running statement" plan. Under this plan no balance is carried forward, but as the slips are sorted the amount of the charge is entered on a statement, which is eventually sent to the customer at the end of the regular payment period. In some stores this statement is made to show details of each purchase, while the store itself retains only a record of the total amount charged. In other cases the statement is prepared in duplicate and the carbon copy is retained by the store as a record of the account. This feature is embraced in other patented systems, which provide a regular ledger binder for holding the original statement form and the duplicate ledger account page.

This method has some of the advantages of the one previously mentioned, particularly in that it avoids the labor of statement-making at the end of a month. It is more flexible also in that the individual sales slips may be used for other purposes after the total of each has been transferred to the account page or statement. The disadvantage is that, where the running balance is not essential, the work of footing the accounts is apt to be neglected, causing delay and extra labor at the end of the month or other charge period.

From a bookkeeping standpoint the fundamental objection to both of the methods here suggested is that they encourage careless and inaccurate handling of the accounts, because they provide no formal ledger account page and give no special recognition to the necessity for entering cash payments and other charges and credits. Where the individual proprietor of a single store keeps all the accounts himself, he may be satisfied with a rough-and-ready method of dealing with this phase of the problem, but such a policy cannot be pursued in a chain of stores where individual supervision is lacking. Under such circumstances it is essential that each account be complete as to both credits and charges, and that the balance be under continuous control. The form of the account is not, of course, the most important feature, but, whatever form is used, there must be an understanding that a definite memorandum as to each charge and credit must form a part of the account record and that no charge or credit can be made to an individual account without becoming a part of the total or control figures.

Use of Control Accounts.—To make possible a control account, it is necessary to secure the daily total for each class

of entries in the individual accounts. These will be ordinarily the following:

1. Charge sales
2. Other charges to customers (corrections, adjustments, etc.)
3. Cash received from customers
4. Other credits to customers (allowance, returned goods, etc.)
5. Bad accounts written off.

In most instances the control account in the head office will be carried simply in totals, without regard to the particulars of the individual accounts. Each store unit of the chain will keep its own records of the individual accounts and, since the store has on file all the particulars, it must prepare and furnish to the head office the daily totals. The total of charge sales can most easily be found by adding the day's charge sales slips before they are sorted and filed according to customers' accounts. Where the individual slips are added by the sales clerks and there is an adding machine or cash register available for running the total at the end of the day, comparatively little work is involved. Where the method of carrying the customers' accounts interferes with this practice (as in some of the plans suggested above), it will be necessary to arrive at the total charge sales in some other manner. A record may be kept in the back of the sales slip book and the total of each book footed at the end of the day. In some cases the sales slip books are made up with a triplicate copy of each slip, the third carbon being left in the book and used to determine the total sales at the end of the day.

If an accurate record of other charges and miscellaneous credits to accounts is to be maintained, it will be necessary to insist on the preparation of some sort of a memorandum or slip for each such charge or credit. If an overcharge has been made, it will not be sufficient merely to scratch the item off the slip of a previous day. A credit memorandum slip of some sort must be issued and handled through the accounts, according to the same general plan followed with a sales slip. The totals of such credits and of any miscellaneous charges must be taken separately at the end of the day and recorded in the proper manner.

The item of cash received on charge accounts is a simpler proposition to handle. The ordinary procedure is to employ a cash register carrying a separate dial for cash received on account. The total of this cash for the day is then automatically brought out by the register and may be reported without further clerical

BLANK STORES COMPANY
DAILY STORE REPORT
STORE NO. ______

Day of Week ______________________ Date ______________ 19___

CASH

	Amounts	Totals
Received for Cash Sales:		
Register Reading Today	$.......	
Register Reading Yesterday	_______	
Net		$........
Received on Charge Accounts:		
Register Reading Today	$.......	
Register Reading Yesterday	_______	
Net		$_______
Total Cash Received Today		$........
Deduct: Cash Paid Out Today (details below)		
....	$.......	
....	....	
....	....	
....	....	
....	_______	
Total Cash Paid Out Today		$_______
Net Cash Deposited		$=======

CHARGE SALES

Total Charge Sales Today	$........
Add: Additional Charges for Errors, etc	_______
	$........
Deduct: Allowances for Returned Goods, Shortages, etc. (as per list and explanation on reverse side)	_______
Net Charge Sales Today	$=======

Signature of Store Manager ______________________

FIG. 9.—Daily Store Report.

The use of this form is similar to that of the form shown in Figs. 2 and 3. Additional spaces are provided, however, for information regarding charge sales and cash received on charge accounts. The ruling above assumes that the cash register has a separate dial for cash received on charge accounts. Where the cash register has only one dial and shows a single total representing all cash received during the day, the ruling will have to be changed so that the total received on charge accounts may be figured separately and deducted from the grand total, leaving a balance representing cash sales.

labor being involved. Where a separate dial on the cash register is not available, the only alternative is to place on a file or in the cash drawer a memorandum of each amount paid on account and to total these memos at the end of the day.

The problem of maintaining an adequate control account for the accounts receivable or charge accounts of a chain of retail stores does not differ materially from the problem as it relates to an individual store. The head office bookkeeper will carry in his general ledger an account covering the outstandings of each store unit in the chain. From the daily report of each store (prepared in the form indicated by Fig. 9) he will abstract the total of the charge sales, cash receipts on account, and other

BLANK STORES COMPANY
SUMMARY OF DAILY REPORTS
STORE NO._______MONTH_______.

	Cash Section						Charge Account Section			
Day	Cash Sales	Cash Received on Charge Accts.	Total Cash Received	Cash Paid Out		Net Cash Deposited	Total Charge Sales	Adjustments		Net Charge Sales
				Account	Amt.			Additions	Deductions	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Total										

FIG. 10.—Summary of Daily Reports.

This form may be used in the head office to summarize store reports like those shown in Fig. 9. A separate sheet will be used for each store each month. The column totals may be posted directly to the ledger accounts from this form, or may be first entered in a general cash receipts book, such as is shown in Fig. 11. Not all the columns in the "Charge Account" section will be posted; if separate ledger accounts are kept for the charge sale adjustment items, columns 8, 9, and 10 will be used, while if one ledger account only is kept for net charge sales, the total of column 11 only will be posted. In either case the total of column 11 will be posted as a debit to the "Customers' Accounts" control account.

charges and credits, and, by journal entry, bring these amounts into the control account. The balance of the control account at the end of the month must equal a total of the balances of the individual accounts against customers which are carried by the retail store.

Inasmuch as there would be a large number of postings in the ledger account, if the charges and credits of each day were entered separately, the totals will probably be accumulated on some separate record for the month, or other accounting period, and the grand totals of the period only will be entered in the

BLANK STORES COMPANY

GENERAL CASH RECEIPTS BOOK

Page Number

Date	Particulars	Post Ref.	BANK DEPOSITS				CASH PAID OUT BY STORES		CASH RECEIVED BY STORES		OTHER CASH RECEIPTS			BANK TRANSFERS
			First Nat'l Bank	U.S. Nat'l Bank	Central State Bank	City Trust Co.	Account	Amt.	Cash Sales	On Charge Accounts	Sales of Misc. Suppl.	Sundries Account	Sundries Amt	Amounts Transferred
			Dr.	Dr.	Dr.	Dr.		Dr.	Cr.	Cr.	Cr.		Cr.	Cr.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

FIG. 11.—General Cash Receipts Book.

This form may be used for recording cash receipts of a large chain with several bank accounts and other lines of business in addition to its retail stores. The information regarding store cash transactions is assumed to have been taken from the "Cash" section of a form like that shown in Fig. 10. The totals of columns 2, 3, and 6 of Fig. 10 will be entered at the end of each month in columns 10, 11, and 9 of this form, while the total of column 7 of Fig. 10 will be entered in column 4, 5, 6, or 7 of this form, depending on which bank has received the deposits from the particular store involved. Since these entries relating to the stores are placed in the general cash receipts book only once a month, they can be readily identified and posted without difficulty to the ledger accounts affected. Other cash receipts of the enterprise will be entered from day to day in columns 12 and 14 of this form and posted accordingly. For bank transfers, see page 155.

ledger account. This follows the procedure outlined in connection with handling the cash. Since the information as to the charge accounts will doubtless be included in the same report which covers the cash transactions of the day, the cash receipts record may readily be expanded to include also the charge account data. Such a composite form for use in the head office is shown in Fig. 10. At the end of the month, or other accounting period, the total of each column will be made the basis of an entry in the general ledger.

Where the business of the chain involves the handling of considerable cash, in addition to that received through the stores, the totals of the record just mentioned may be carried forward onto a general cash receipts book, such as is portrayed in Fig. 11. A book of this sort is subject to unlimited modification in accordance with the peculiarities of the individual enterprise.

Verifying Outstandings—Losses and Safeguards.—One function of the control account is, naturally, to insure the correctness of the individual accounts kept by the retail stores. For most purposes this accuracy may be taken to have been proved if the balance in the control account at the end of a period corresponds with the aggregate of the balances of the individual accounts against customers. To determine that this agreement exists, it is customary to take a so-called "trial balance" of the individual accounts at the end of each period. This trial balance is merely a list of the amounts outstanding against customers. The list may be made up and submitted by the store manager, or may be prepared by a representative of the head office, if so desired. It will be understood, of course, that there is a separate head office control account for the charge accounts of each store unit, and a separate trial balance from each store to be reconciled with its own particular control.

In case of a disagreement, reasonable efforts should be made to locate the source of the error and make a correction. If the discrepancy is a minor one, it is a question as to how far an audit of the transactions may profitably be carried; it may be simpler merely to make an adjustment which will bring the accounts into agreement and endeavor to avoid further variation. In no case should discrepancies be permitted to remain unadjusted in the accounts.

In some chains it is not considered sufficient to carry at the head office a mere skeleton control account, but it is deemed advis-

able to duplicate all the individual accounts at the head office. This involves a very considerable amount of bookkeeping. Each store must submit daily, not merely the total of its charges and credits to customers, but also the individual names and amounts. Usually this is accomplished by ruling the back of the daily report form with spaces for submission of this detail. It will be obvious that this procedure is practical only where a comparatively small number of charge accounts is carried by each store. The head office is, of course, in much closer touch with the status of each account, but at the expense of what is usually deemed an excessive amount of clerical labor.

The treatment of hopelessly bad accounts deserves some mention here. Where collection is impossible, an account may best be written off and eliminated from the list of collectible outstandings. The procedure in the store is simply to remove the account sheet or slips from the active file. The delinquent customer will be "blacklisted" both at the store and at all other stores in the chain. A separate report of such accounts should be made to the head office, if, indeed, the head office itself does not take the initiative in deciding which accounts are to be written off. A separate journal entry will be required to eliminate the balance from the control account. If the account is subsequently collected or reinstated, another special journal entry is required on the head office books, as the account cannot be treated as a live balance after having once been eliminated or written off.

Even greater safeguards are necessary in handling charge accounts than are required for ordinary cash transactions. Within the store the possibility of error may be reduced through the use of serially numbered sales slips. If the management insists on all these slips being duly accounted for, there is little likelihood of goods going out to customers without being properly charged. In some stores a special type of cash register is used, which prints on the slip and records on a dial the amount of each charge sale. This rather elaborate mechanism serves the double purpose of eliminating uncharged sales and providing a total of the day's charge sales without additional clerical labor. Another necessary safeguard is to require the approval of the store manager on all credits for overcharges, returned goods, and similar allowances.

In the head office the control account and periodic trial balance offer a reasonably satisfactory check on the handling of the indi-

vidual accounts. This is further strengthened by requiring that the periodic statements be mailed from the head office; their amount can then be checked against the amount shown for the customer on the trial balance. Where the head office alone has authority to authorize extension of credit to new customers, the danger of loss through bad debts is greatly reduced.

Bookkeeping Entries.—The journal entries to be prepared by the head office bookkeeper, in connection with the handling of accounts receivable, are indicated briefly below. As noted in Chap. III, these entries may not come in the form noted from any one journal, but they express in bookkeeping terms the effect of the transactions taking place in connection with the creation and collection of charge accounts. In many instances the actual entry spread on the books may be a composite of several kinds of transactions, but the net result is the same.

Assuming that the store carries separate ledger accounts for the various offsets to sales (that is, allowances, returned goods, etc.), the entries arising from a cumulation of the daily reports of one store in the chain will be substantially as follows:

Dr. Customers' Accounts (control)	$xxxx	
Cr. Charge Sales		$xxxx
Dr. Customers' Accounts (control)	$xxxx	
Cr. Charge Sale Adjustments		$xxxx
(additional charges to correct errors, etc.)		
Dr. Charge Sale Adjustments	$xxxx	
Cr. Customers' Accounts (control)		$xxxx
(credits for overcharge and similar errors)		
Dr. Cash in Bank	$xxxx	
Cr. Customers' Accounts (control)		$xxxx
(cash received on charge accounts)		
Dr. Returns and Allowances	$xxxx	
Cr. Customers' Accounts (control)		$xxxx
(goods returned by charge customers, etc.)		
Dr. Bad Debt Losses	$xxxx	
Cr. Customers' Accounts (control)		$xxxx

It may easily be that the entry for cash received on account will be combined with other cash entries and that the composite entry for the period may be in the following form:

Dr. Cash in Bank	$xxxx	
Cr. Cash Sales		$xxxx
Customers' Accounts (control)		$xxxx

The number of accounts carried in the ledger to record sales and sales adjustments will depend on the nature of the business and the requirements of the management. In some cases the sales may be classified by products or departments and the distinction between cash and charge sales may not be maintained in the ledger accounts. In some cases all allowances, returned goods, adjustments, etc. are carried directly into the "Sales" account and not distinguished by a separate ledger account. Some further attention to this subject is given in connection with a discussion of the head office bookkeeping records in Chap. XII.

The illustrative journal entries given above refer only to a single unit in the chain. There will, of course, be a corresponding set of accounts covering the outstandings against customers, cash sales, charge sales, etc. for each unit in the chain. Likewise, there will naturally be a corresponding set of entries for each unit. This feature of the head office bookkeeping work is also further referred to in a later chapter.

CHAPTER V

MERCHANDISE CONTROL METHODS

In the two preceding chapters attention has been given to the problem of accounting properly for revenues. That problem is a reasonably simple one, both from a theoretical and a practical standpoint. The management must have certain very definite information regarding sales, cash receipts, customers' accounts, etc. The choice of accounting methods is largely a matter of selecting such time- and labor-saving devices as will best suit the conditions prevailing in the retail stores. Added to this is the necessity of providing proper safeguards against loss of cash or other revenues, as indicated in the foregoing discussion.

A consideration of the question of revenues, however, is incomplete unless there are included also the offsets to, or deductions from, such revenues. These offsets and deductions consist of the cost of merchandise sold and the expenses incident to selling it. Every time a sale takes place and the store receives revenue, in the form of cash or a collectible claim against the customer, the concern also parts with something of value—the goods sold. If a profit has been realized on the sale, it is, of course, the difference between the cost of the goods sold and the amount realized from their sale. Determining what this cost is and what profit has been realized is undoubtedly the most complicated and difficult task which the retail store accountant has to undertake.

Types of Merchandise Control Methods.—The nature of the difficulty will be made clear by a brief consideration of the manner in which merchandise is handled. Goods are bought and their cost price is definitely known at the time of purchase. When those goods are sold, however, their cost price is far from easy to determine. In the first place, a record is seldom kept which will identify completely each article of merchandise sold. Some stores do keep such a detailed record, but in many types of business it would be wholly impractical. Moreover, merchandise is frequently bought by the carload, by the ton, or by the case, where it is sold by the dozen, by the pound, or by the can.

Throughout the procedure the goods are dealt with on an entirely different basis at the time of sale and at the time of purchase.

In theory, it may be said that the accountant should measure merchandise acquired and disposed of in the same terms by which he measures cash received and paid out. The stock of goods is important and valuable. It represents a large percentage of the capital invested in the business. It is of such a fluid and often changeable nature, however, that genuinely adequate accounting for it is almost never accomplished. It seems inevitable that the methods adopted either turn out to be inaccurate and inadequate or else require an amount of clerical labor in excess of what can be justified by the results obtained.

The problem resolves itself, therefore, into a search for the happy medium in handling merchandise accounts. Some scheme must be devised in which the maximum of control will be exercised with a minimum of labor and expense. It will be a matter of nice adjustment to avoid, on the one hand, complicated and burdensome methods of obtaining the information, and, on the other, a deficient plan of control which may leave the management in ignorance of vital facts about the merchandising features of the business.

Three types of method of merchandise control are found in general use in retail store enterprises. These are discussed in some detail in succeeding chapters, but they may be very briefly described at this point. First is the periodical physical inventory method. Under this method practically no control is exercised over the merchandise; a record is kept of what has been bought for a given store and periodically a physical inventory of what remains on hand is taken and valued. The assumption is that any goods no longer on hand have been sold.

The second method is the detailed perpetual inventory. Where this plan is in force, a record is kept of every item purchased and every item sold or otherwise taken out of stock. The difference between the amounts received and disbursed is shown at all times by the record and should represent the amount of that particular kind of goods actually on hand.

The third method is a modification of the second. It provides for perpetual inventories carried in totals at retail prices but without detail as to the items making up the stock. It has a number of peculiarities and is applicable only under special conditions. In certain types of business, however, it is used with great success.

Each of these types of method has its own advantages and disadvantages. Operating conditions will dictate the choice of one method for one enterprise and another method for another. It may even be desirable to use different methods for different parts of a chain store organization. Retail stores, for example, may be unable to use satisfactorily anything except the periodic physical inventory, whereas the central warehouse of the chain, if one exists, may well carry detailed perpetual inventory records.

Needless to state, the merchandise control procedure in a chain enterprise includes far more than a set of inventory records, of whatever type they may be. The methods of requisitioning, purchasing, receiving, transferring, and stocking the goods are invariably of great importance. These methods may properly be considered basic for any system of merchandise control and they warrant a complete discussion before the other problems mentioned are considered in detail.

In considering the requirements of a chain store enterprise along these lines there may be taken first the case of a comparatively simple business—that is, a chain with relatively few units in one community or locality, where goods are ordered for specific needs of the various units and delivered direct from the vendor to the retail store. It may be assumed also that the merchandise is of a somewhat diverse character and that the stock turns over rapidly and requires to be replenished frequently. The merchandise problem comes forward for attention at three points —when the goods are bought, when the goods are sold, and when the stock on hand is made the subject of inventory.

Ordering the Merchandise.—In the first stage of this procedure a demand arises within one of the retail stores for particular goods. The store manager must make this demand known to the purchasing agent of the chain, assuming that the latter is charged with the duty of making all merchandise purchases. This demand on the purchasing agent to secure certain goods is ordinarily expressed in the form of a store order or requisition. This may simply be a list of the articles required, but will often contain also such additional information as the purchasing agent or merchandise manager may consider desirable, such as the quantity on hand in the store at the time, approximate number of units sold during a given period, etc. The form of this store requisition may be similar to that shown in Fig. 12, or modified to suit individual needs.

Briefly, this store order will be made out at regular intervals, depending on the frequency with which stocks need replenishment. In some retail store units, an order for new goods is placed daily, in some every other day, in some once a week. Amounts ordered are dependent, of course, on the merchandise policy of the enterprise. The store manager may have fixed maximum and minimum stock quotas. More frequently used is the so-called "short" book, which is simply a memorandum jotted down by the manager or sales clerk whenever the last unit of a particular class of goods is sold. The requisition will normally be made

BLANK STORES COMPANY

REQUISITION FOR MERCHANDISE

Requisition Number

STORE NO. ________

Date________________________

Purchasing Agent — Please order for delivery to this store the following merchandise:

These columns for use of store manager					These columns for use of purchasing agent	
Quantity Wanted	Description of Merchandise	When Wanted	Quan. Now in Stock	Aver. Quan. Sold per Wk.	Ordered from	Purch. Order No.

Signature of Store Manager________________________

FIG. 12.—Store Requisition for Merchandise.

This form may be used by a retail store in placing an order with the head office purchasing agent for merchandise wanted. The first five columns will be filled out by the store manager and the remaining two by the purchasing agent when he has issued a purchase order for the items requested. The form will probably be made out in duplicate, one copy going to the head office and one being retained by the store manager.

up in duplicate, one copy going to the head office and one copy remaining in the store.

To save clerical labor and to facilitate rapid handling of orders, these are sometimes placed by telephone. This is particularly true where perishable and quickly consumed goods are concerned —as in the case of restaurants. In some concerns there is a sort of standing order arrangement in effect, under which the manager needs only to designate to the delivery man the quantity required for the day; this is likely to be true of such commodities as ice cream, ice, milk, bread, etc. In every instance, however, there should unfailingly be some means of notifying the head office of the amounts ordered to be delivered (and subsequently

PURCHASE ORDER—ORIGINAL

BLANK STORES COMPANY

CHICAGO, ILLINOIS

To________________________ Order No.____________

Address____________________ Date____________

Please enter our order for the following merchandise, subject to all provisions and conditions herein contained:

Deliver to Our Store No. ______ Address____________________

Date Delivery Wanted____________________ Ship via____________

Terms____________________ Prices F.O.B.____________________

Quantity	Description	Price per Unit	Total Amount

CONDITIONS AND INSTRUCTIONS

Please acknowledge receipt of this order immediately and notify us when we may expect to receive the merchandise. Goods delivered on this order are subject to our inspection and approval. We reserve the right to reject any goods which do not comply with our specifications or which are received later than the delivery date indicated. Prices and terms must be in accordance with the stipulations above and no extra charge for packing or delivery will be allowed unless expressly authorized by this order.

Important.—All boxes and packages must contain packing slips listing contents and referring to our purchase order. Invoices must be rendered in duplicate and must invariably show our purchase order number.

BLANK STORES COMPANY

by____________________

Purchasing Agent

FIG. 13*a*.—Purchase Order (Vendor's Copy).

This form may be used by the general purchasing agent of the chain for ordering goods to be delivered to the stores. The rulings are self-explanatory. Several copies of the order will be prepared; the original (here illustrated) going to the vendor, one or two copies being retained by the purchasing department, and a fourth copy possibly going to the store manager for use as a receiving report (see Fig. 13*b*).

of the amounts actually delivered), so that incoming invoices from vendors may be properly handled in the head office, and a prompt and intelligent supervision exercised over the activities of each retail outlet.

When the head office receives a requisition from a retail store, the purchasing agent or merchandise manager will issue a purchase order in the name of the business for such goods as he desires to have delivered to the store to fill the requisition. Inasmuch as every purchase order constitutes, on acceptance, a binding contract, it is important that the form be carefully drawn up to cover all the conditions under which the concern wishes the contract to be made. The actual blank, spaces for describing the goods to be delivered are usually easy to prepare, but careful study may well be devoted to the preparation of the instructions which become a part of the order, and also to designing a size, shape, and form of ruling which will make the order serve all purposes in the most satisfactory manner. A specimen purchase order (vendor's copy) is shown in Fig. 13*a*.

Several copies of a purchase order are ordinarily made and the carbons retained by the purchasing company may be variously ruled so as to provide spaces for recording amounts received and other data of interest regarding the goods. One carbon copy of the order may be sent to the retail store as notice to the manager of what is to be delivered to him. This copy may be ruled for use also as a receiving report and the store manager may note the amounts received on his copy as the goods come in. The standard objection to this procedure is that, if the quantities on order are known to the clerks who count the goods received into stock, there will be a tendency to slight the work of counting and to receipt for uncounted shipments.

At all events, the purchasing department will keep at least one copy on file and may possibly file two copies—one numerically according to the date when the order was placed, and the other alphabetically by name of the vendor to whom the order was sent. The purchasing department will note on one of its copies the quantities received until the full amount has been delivered, at which time the order will be transferred to a closed or "filled" order file.

Receiving Records.—When goods are delivered to one of the retail stores, it is the first responsibility of the store manager to tally the quantities and make the proper report to the head office.

PURCHASE ORDER—STORE COPY
BLANK STORES COMPANY
CHICAGO, ILLINOIS

To__________________ Order No.__________
Address__________________ Date__________

Please enter our order for the following merchandise, subject to all provisions and conditions herein contained:

Deliver to Our Store No.______ Address______________
Date Delivery Wanted__________ Ship via__________
Terms______________ Prices F.O.B.__________

Quantity	Description	Price per Unit	Total Amount

REPORT OF GOODS RECEIVED

Invoice Department—We have today received the merchandise called for by this purchase order, except for the following items:

____
____
____

Remarks__________________________

Signature of Store Manager________________

FIG. 13*b*.—Purchase Order (Store Copy).

The upper portion of this form is identical with that illustrated in Fig. 13*a*. It will be prepared as a carbon copy of the order sent to the vendor, the lower portion being left blank for entering a report of goods received. This copy will be kept on file by the retail store manager until the goods arrive; after making the proper notations he will forward it to the head office as a "receiving report." In case it is desired not to inform the store manager of the quantities ordered, the "Quantity" column of this copy will be left blank, to be filled in by the manager when the shipment arrives.

This may be done by a notation on his copy of the purchase order-in case he receives one; in such event, his copy will be ruled some, what as indicated in Fig. 13*b*. In case he receives only a part of the goods called for by the order, he will prepare a dummy or memorandum copy showing the amount still to be delivered. Retaining this for his file, he will forward the printed form to the head office with a notation of the exact amount received.

BLANK STORES COMPANY

REPORT OF MERCHANDISE RECEIVED

Report Number

STORE NO. ________

Date ________________

Invoice Department——We have today received the following merchandise which we find in good order except as noted below

Vendor's Name	Our Purchase Order No.	Quantity Received	Description	Remarks

Quantities Checked By ________________ Quality and Condition Approved By ________

Signature or Store Manager ________________________________

Spaces below for use of head office only

Checked With Purchased Order ________ Checked With Invoice ________________ Entered On Stock Records ____________

FIG. 14.—Report of Merchandise Received.

This form may be used by the retail store manager to notify the head office of goods received in the store. These reports will be serially numbered and a separate sheet will be used for each item or shipment received. When the head office has checked the items against the purchase orders and invoices, the receiving report will be attached to the invoice and the two forms will be filed together, either in an invoice file or in a voucher jacket (see Fig. 15), depending on the system in force.

Where no copy of the purcnase order is furnished him, he must be supplied instead with some form of receiving slip or report by means of which the same information can be given to the head office. Preferably a separate slip, such as is shown in Fig. 14, will be used for each item received; the head office can then attach the slip directly to the vendor's invoice as evidence that the bill is in line for payment. A single report sheet may be used for all of the receipts for one day; in such cases the head office will

check the individual items against the invoice and will probably enter on the invoice the number of the receiving report.

In the case of goods which are delivered daily in varying quantities according to the immediate needs of the store—like milk, bread, etc.—a special receiving report will probably be kept, covering a week or a month at a time; this report will be sent to the head office at the end of the period for which the invoice is to be rendered, as further noted in Chap. XVII.

One of the instructions on the purchase order is ordinarily that all vendors' invoices be sent direct to the head office. When such an invoice is received, the purchasing department must compare it with the purchase order for approval as to quantity, quality, price, and terms, and then attach the store manager's receiving report as evidence that the goods have actually been delivered. After test of the mathematical accuracy of extensions, footings, etc., the invoice is placed in line for payment.

In some chain enterprises where greater latitude is permitted the individual store managers, certain of the forms mentioned are eliminated by having invoices delivered direct to the store and approved by the store manager as to quantity and quality before being sent to the head office for payment. In some cases the store manager is even permitted to do a certain amount of the buying on his own responsibility, which may still further reduce the amount of head office clerical work involved in the handling of orders. Whether or not such a policy may satisfactorily be adopted depends on the character of the enterprise and the store management personnel.

Handling Invoices—The Voucher System.—The problem of handling vendors' invoices after they have been approved, and of recording them properly on the books of account, is that of the head office bookkeeping department alone. The system adopted must provide careful yet expeditious payment of the approved invoices and also for allocation of the charges to the merchandise accounts of the stores receiving the goods. Effort will naturally be made to adopt a single invoice register form which will serve both purposes.

Since in a chain enterprise goods for a number of different stores are usually purchased from a single vendor and separately invoiced by the vendor, it is essential to economy in paying accounts that the plan provide for gathering together all invoices for one vendor and paying them in a single check. The logical

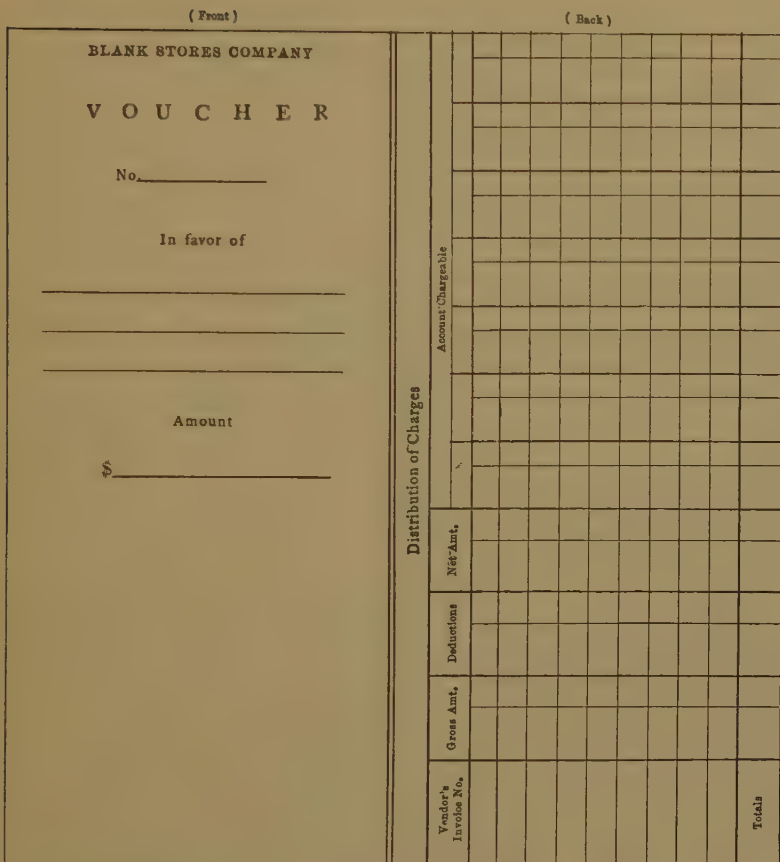

FIG. 15.—Voucher.

In the above illustration are shown the rulings frequently used for a voucher, or a "voucher jacket," as it is sometimes called. The vendor's invoice or invoices are attached to the reverse side of this sheet, which is then folded along the center double line for filing purposes. The information entered on the "front" side of the voucher jacket is for identification purposes only. On the "back" side the several invoices covered by the voucher will be listed and the net amount in each case distributed in one of the columns to the right under the name or number of the account chargeable.

plan is a voucher system, of such a type as will best meet the need. This will involve a voucher "jacket" or folder to which the invoices for a single vendor will be attached, and on which can be shown the particulars of the charges contained in those invoices. The voucher will show also the total payable to the vendor—the amount of the check which will be drawn.

There is not space in a work such as the present for a detailed description of the operation of a voucher system. Its outstanding feature is the elimination of detailed ledger accounts with each vendor-creditor. The voucher register is made to serve both as a journal and as the record of invoices to be paid. The voucher itself consists of a prepared form covering one or more approved invoices, and may be drawn up with rulings similar to those indicated in Fig. 15. Checks are drawn in payment, not of the balance due on a ledger account, but of individual vouchers, and space is provided in the voucher record for entry of the check number when payment has been made. The open vouchers (that is, those for which no check has been written) constitute the outstanding trade accounts payable of the enterprise at any given time.

While the first few left-hand columns of the voucher record or voucher register are concerned with particulars of the liability and its payment, the remaining or distribution columns provide for allocation of the charge. In a small enterprise with comparatively few accounts, a separate column may be provided for each account chargeable. In a chain enterprise this is seldom possible, inasmuch as there will be a separate merchandise account for each store in the chain and also probably quite a number of operating expense accounts for each store likewise. Operating expenses (considered further in Chap. IX) are of a different nature from merchandise purchases, but, as the invoices covering them are ordinarily vouchered and entered in the voucher record in the same way that merchandise invoices are handled, it is necessary to provide space for their distribution.

Various forms of voucher register have been devised to meet the requirements of different enterprises. If a separate column for the merchandise account and each expense account of every store unit is to be provided in the register, more space will be required than is ordinarily available on the double page of a columnar journal which can be handled with any degree of convenience. One method of economizing on lateral space is the insertion of

Left-hand Long Sheet

BLANK STORES COMPANY—VOUCHER REGISTER GENERAL								
Date	Name of Vendor	Voucher No.	Amount	Payment		General Accounts		
				Date	Check No.	Particulars	Account	Amt.
			Cr.					Dr.

Right-hand Short Sheet

CHARGES - STORE No. ___					
Merchandise	Wages	Wrappings	Repairs	Sundries	
				Account	Amt.
Dr.	Dr.	Dr.	Dr.		Dr.

Left-hand Short Sheet

CHARGES - STORE No. ___					
Merchandise	Wages	Wrappings	Repairs	Sundries	
				Account	Amt.
Dr.	Dr.	Dr.	Dr.		Dr.

The short sheets whose rulings are indicated at the right provide columns for distributing merchandise and expense charges to the various retail stores. Each sheet will take care of two retail stores, one on each side of the sheet. There will be as many short sheets as are required for the number of retail stores in the chain. As the accounts carried for all stores should be the same, the rulings of all of these short sheets will be identical.

Right-hand Long Sheet

CHARGES - DELIVERY EXPENSES - ADMINISTRATION EXPENSES											
Delivery Drivers' Wages	Delivery Gas & Oil	Delivery Truck Repairs	Salaries Executives	Salaries Clerical Force	Stationery & Printing	Telephone & Telegraph	Postage	Advertising	Travelling	Sundries	
										Account	Amt.
Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.		Dr.

FIG. 16.—Voucher Register.

The voucher register rulings shown above may be used where it is desired to provide a separate column for each item of expense occurring frequently. The total amount of the voucher is entered in column 4 of the left-hand long sheet, while charges are distributed in the columns of the short sheets and the right-hand long sheet, depending on their nature. Information as to payment of the voucher is entered in columns 5 and 6 of the left-hand long sheet, while columns 7, 8, and 9 are used for entering charges not provided for elsewhere. The various column headings may, of course, be altered to suit individual requirements.

short sheets in the voucher record. One of these sheets may be used for each store in the chain and ruled with a column for each of the merchandise and expense accounts of that store. An example of the ruling of a voucher record of this character is shown in Fig. 16. The principal objection to the use of this form is that a great deal of the paper is left blank and the record of a single accounting period occupies a bulky volume because of the numerous short sheets.

Another solution of this difficulty is presented in Fig. 17, where two columns only are devoted to each store. Here all merchandise purchases are entered in one column and all expenses in another. To obtain a distribution of the expenses by expense

Left-hand Sheet

BLANK STORES COMPANY
VOUCHER REGISTER

Date	Name of Voucher	Voucher No.	Check No.	Amount	Administration Expenses				General Accounts	
					Office Sal.	Staty.&Prtg	Tel.Tel.& Post.	Misc.Off. Exp.	Account	Amt.
				Cr.	Dr.	Dr.	Dr.	Dr.		Dr.

Right-hand Sheet

BLANK STORES COMPANY
VOUCHER REGISTER

Store No.1		Store No.2		Store No.3		Store No.4		Store No.5		Store No.6	
Mdse.	Expense	Mdse.	Expense	Mdse.	Expense	Mdse.	Expense	Mdse.	Expense	Mdse.	Expense
Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.

Fig. 17.—Another Form of Voucher Register.

This form of voucher register may be used where it is desired to carry a less bulky record than the one suggested in Fig. 16. Here each store is assigned two columns only. The total of the "Merchandise" column may be posted to the store merchandise account, but the items in the "Expense" columns will have to be posted individually to the various store subexpense accounts in use.

groups, or of the merchandise by merchandise departments, it is necessary to recapitulate each column at the end of the period before postings can be made to the ledger accounts. This recapitulation may be made roughly by means of an adding machine, the totals only being entered in a column summary, or a more formal recapitulation sheet may be adopted and made part of the permanent records. The latter method is illustrated in Figs. 32 and 33 in connection with Chap. IX. Another possi-

bility is the separation of merchandise purchases and expense items through the use of a separate voucher register for each, the number of columns required in each journal being thus greatly reduced.

Other Purchase Records.—It has been assumed in the discussion above that all purchases of merchandise are made in due form and that invoices are received and vouchered in connection with every such purchase. It may properly be noted that in some instances merchandise may be bought directly for cash and thus not pass through the voucher register. If this practice prevails, it is necessary to insert separate merchandise columns in the cash disbursements record to provide for distribution of the charges. Preferably, however, the vouchering of all payments should be insisted upon and no charges to merchandise accounts should originate except through the voucher register.

The repeated references above to the use of the voucher register or record might lead to the assumption that no other means of handling purchase invoices is feasible. This, of course, is not the case. It is prefectly possible, and may in some cases be desirable, to substitute for a voucher register a simple purchase journal, or purchase distribution book, to be utilized in connection with a set of accounts payable with trade creditors. Such a journal or distribution record will not differ materially in appearance from the sort of voucher record shown in Figs. 16 and 17, except that the column for entering the number of the check issued in payment of the invoice will be eliminated.

For recording the particulars of accounts payable to the various trade creditors, a subsidiary ledger of the ordinary character will be maintained. Each invoice entered in the purchase journal will be posted as a credit to the account of the vendor concerned and checks drawn in payment will be posted as debits from the cash disbursements record. These individual accounts payable will support a control account in the general ledger, just as the individual charge accounts against customers, discussed in Chap. IV, support the corresponding control account referred to in that connection.

In the case of both voucher records and purchase journal a separate section of the book will ordinarily be reserved for credit memoranda received or demanded from vendors, in reduction of previous charges on account of errors, shortages, poor quality, etc. These credit memoranda will be entered and distributed in

the same manner as purchase invoices, but will have exactly the opposite effect, being posted as debits in the accounts payable and operating to reduce the charges to merchandise and expense accounts.

In the above discussion of the voucher register and the purchase journal little reference has been made to the record of cash disbursements. If a concern paid all of its invoices immediately on receipt and never had any outstanding accounts payable for merchandise, the invoice register as such could be done away with and all payments could be handled through the cash disbursements record alone. Since such a situation is almost never met with, it has been assumed here that every concern will, of necessity, set up its merchandise invoices first in a record such as a voucher register or purchase journal, and that the cash disbursements book, therefore, will become largely a record of payment of invoices previously recorded. As such it is taken up in Chap. XI and given no further attention at this point.

Bookkeeping Entries.—A brief indication may be given here of the form of the entries which will result from the transactions referred to in this chapter. These entries will vary considerably in accordance with the general bookkeeping plan to be followed in handling the merchandise accounts. The main element of variation has to do with the treatment of the merchandise account, which may be considered either as primarily a profit and loss account (usually known in the ledger as "Merchandise Purchases"), from which the inventory element is separated at intervals, or which may be considered primarily an asset or inventory account, from which the profit and loss or cost of goods sold element is periodically eliminated. The net result is identical, but the form of the entries differs.

Assuming the first and probably more familiar method, the original entry coming from the voucher register will be in the following form:

Dr. Merchandise Purchases—Store No. 1	$xxxx	
Operating Expenses (in detail)—Store No. 1	xxxx	
Merchandise Purchases—Store No. 2	xxxx	
Operating Expenses (in detail)—Store No. 2	xxxx	
etc.		
Cr. Vouchers Payable		$xxxx

In case a purchase journal or distribution book and an accounts payable ledger are used in place of a voucher register, the entry

will be in the same form, except that the account to be credited will probably be known as "Accounts Payable" instead of "Vouchers Payable." This account will be the general ledger control, postings to the accounts of the individual creditors having been made item by item from the purchase record throughout the period.

Under either method the entry covering the summary of vendors' credit memoranda will be the exact reverse of that indicated above, appearing as follows:

Dr. Vouchers Payable (or Accounts Payable)................	$xxxx	
Cr. Merchandise Purchases—Store No. 1............		$xxxx
Operating Expenses (in detail)—Store No. 1.....		xxxx
Merchandise Purchases—Store No. 2............		xxxx
Operating Expenses (in detail)—Store No. 2.....		xxxx

Adjustment of the "Merchandise Purchases" accounts referred to above will be made periodically when the results of physical inventories are made known. The bookkeeping procedure at such times is indicated in the concluding paragraphs of Chap. VI. The adjustment actually consists of little more than determining and setting up the value of the goods remaining on hand and charging off the balance of the "Purchases" account as a profit and loss item.

In case the merchandise account is treated primarily as an asset or inventory account, there will be practically no difference in the form of entries coming from the voucher register or purchase journal. The account will probably be known simply as "Merchandise" instead of "Merchandise Purchases." The adjustment for periodical physical inventories will be made in a slightly different manner, although the net result is exactly the same. Any differences which will result from the adoption of other methods of inventory control are indicated in the notes regarding bookkeeping procedure which appear at the end of Chaps. VI, VII, and VIII.

CHAPTER VI

THE RETAIL STORE—PERIODIC INVENTORIES

By means of the accounting records discussed in the previous chapter there are created certain charges to the merchandise accounts of the retail store units in a chain enterprise. These charges represent the cost of the goods delivered to those stores. The next step in establishing control over the merchandising operations of the stores is to determine what becomes of the goods after they are delivered to the store manager.

It was said in the foregoing discussion that there are three possible methods of checking up on these stocks of merchandise—periodic physical inventories, detailed analyses of goods received and sold, and perpetual inventories at retail prices. The purpose of this chapter is to discuss the use of periodic physical inventories as a means of merchandise control. The other methods are taken up in the two chapters next following.

Purposes Served by Periodic Inventories.—The theory of verifying merchandise accounts by means of periodic physical inventories, no other means of verification being used, is roughly as follows. A certain quantity of merchandise of certain value was delivered to a particular retail store. This merchandise, together with what was on hand at the beginning of the period, was available for sale. At the end of the period a count is made of the goods remaining and their value is determined. Presumably, any goods no longer on hand have been sold. The value of the goods delivered to the store, plus the value of the goods on hand at the beginning of the period, less the value of the goods remaining on hand at the end of the period, must represent the value of the goods disposed of to customers.

Not very many years ago this method of determining the cost of goods sold was the only one considered practical by nine-tenths of the business men of the country, whether manufacturers, wholesalers, or retail storekeepers. The weakness of the method, from a control standpoint, is so apparent that it hardly requires comment To assume that whatever has disappeared from stock

and cannot now be located was sold at a fair margin of profit is to ignore all possibilities of shrinkage, deterioration, fraud, theft, and all the other merchandise leaks which are likely to exist in spite of the most careful management. In spite of that fact, however, most retail concerns today continue to use this periodic inventory as the only means of check on their stock of goods—which means that there exists practically no check at all.

In the case of a retail store this is not surprising. Any sort of a detailed perpetual inventory would require information as to the character of the goods sold. Under most conditions this means that it would be necessary to make out a sales slip describing in full the merchandise changing hands at each transaction. Where the character of the merchandise itself does not make this impossible, the volume of business transacted often does. The sales clerk is expected to handle the maximum number of customers during the rush periods and he probably has no time to write out a description of every article sold. If the clerk has time to make out a slip and an attempt is made to identify the items in this way, there is still a considerable problem involved in analyzing the sales slips at the head office, determining the original cost of the goods, and formulating the proper entries to give effect to the transactions on the books.

There are certain types of store where this detailed analysis plan may be pursued satisfactorily. Where the nature of the business is such that the items sold have a certain amount of individuality, and where a single article of comparatively large value constitutes the ordinary purchase of each customer—as in a clothing or a shoe store—the method may be feasible. In the majority of chain store enterprises, however, it is deemed impracticable, so far as the retail stores are concerned. The method may well be applied to the goods in a central warehouse, as noted in a succeeding chapter.

The periodic inventory has so many deficiencies, from an accounting standpoint, that it becomes difficult not to give greater emphasis to what it does not do than to what it does accomplish. The inventory itself is subject to innumerable undetected errors and it provides absolutely no information regarding, or protection against, those losses from theft, breakage, etc. which were referred to above. What is not generally realized, however, is that the periodic inventory may be strengthened by means of collateral information of various types, which,

if properly developed, may reinforce the information it gives to such an extent that reasonably satisfactory control is exercised without an excessive amount of clerical work.

One difficulty with the periodic inventory plan is that there must be a physical inventory as a basis for every financial statement, and where such a physical inventory is inconvenient and difficult to take the tendency is to postpone and avoid it whenever possible. As a result, periodic financial statements may remain uncompleted and the efforts of the accounting department in other directions may be largely nullified. Until such an inventory is taken, the management usually remains in ignorance of one of the most vital facts regarding the business, namely, the amount of the gross margin between the sales of the store and the cost of goods sold.

This does not mean that it is impossible to estimate the amount of gross margin or gross profit; this may be done from a knowledge of the average mark-up, or excess of the set selling price over the cost. If this mark-up was uniform for all the commodities handled and there were no factors of shrinkage or deterioration to deal with, it might be possible to determine accurately the cost of the goods sold and the value of the stock remaining on hand. Since these ideal conditions are not met with in any ordinary retail establishment, there must be some sort of check-up, based on a physical inventory of stock, in verification of whatever estimates have been prepared in regard to the margin obtained in disposal of the goods.

Methods of Taking Inventory.—The method of taking the physical inventory will vary considerably with the type of product being handled. The usual steps are the count, weight, or measurement of goods on hand, the recording of the quantity of each article found in the stock, the pricing of each article on some uniform basis, and the computation of the total value. The work of counting and recording will ordinarily be done by a pair or team of employees, one inspecting the goods and the other writing down the facts reported. Experienced inventory takers will do better work than those not familiar with the procedure, but in many concerns it is the practice to utilize the spare-time services of any available store or office employees.

A great deal has been written on the subject of taking inventories and it is doubtless unnecessary to go into the matter in great detail here. Outside of the questions of care and accuracy

in counting and recording the stock, the most important requirement, from an accounting standpoint, is that the taking of the inventory be timed to coincide exactly with the conclusion of the

BLANK STORES COMPANY

INVENTORY RECORD

Store No.______ Date______

Tag No.

Kind of Merchandise______

Quality, Grade, or Brand______

Unit of Measure______

Quantity on Hand______

Price per Unit: Cost______ Selling______

Total Value: Cost______ Selling______

Called by______ Entered by______

Priced by______ Extended by______

Entered on Summary by______

(Tear off here)

Tag No.

Item______

Quantity______

COUNTED

FIG. 18.—Inventory Tag.

The form illustrated above may be used in taking physical inventories of merchandise. Tags are serially numbered so that all of them may be accounted for. Description of the goods and the amounts on hand are entered by the inventory takers. The lower portion of the card is then torn off at the dotted line and left on the shelf with the goods, to indicate that they have been counted. The upper portion is forwarded to the head office for pricing and extension, which may be shown on the tag or on a separate recapitulation like that illustrated in Fig. 19.

accounting period. The work should be done immediately after the close of business on the last day of the period, and the counting and recording should be completed before any further transac-

tions are entered into by the store as to receipt or disposal of goods.

The greatest care must be exercised to prevent inclusion in the inventory of any goods sold but not delivered, or received but not reported to the head office or vouchered. The goods included in the inventory must be represented by invoices which have been approved and entered in the books of account prior to the closing date. All other items must be rigorously excluded.

The usual means of writing up an inventory list is a standard or stock form of inventory sheet. These sheets, with which almost anyone who has taken an inventory is familiar, are ruled with columns for entering quantity, description, price, and extension. At the top of the sheet space is provided for noting the section of the inventory being taken, location of the goods, and similar identifying memoranda.

While these sheets meet the needs of an ordinary inventory fairly well, there is considerable advantage in a chain enterprise in utilizing something in the nature of an inventory tag or individual record for each article listed. Small sheets or cards specially ruled and prepared in advance for the use of the various units can be distributed by the head office and may even be serially numbered to avoid loss. A sample form is shown in Fig. 18.

The use of these individual tags or slips entails somewhat more writing by the inventory takers, but is an immense advantage to the clerical force in pricing and extending the inventory after it is taken. The reason for this is that the slips from all stores may be sorted together according to articles in the inventory and, when the price for a given article has been arrived at, it may be entered at once on all the slips on which that article is listed. Where the extension is handled by a mechanical calculating device, a very material saving in time will also result from making the extension on a group of articles of the same unit price at the same time. When the pricing and the extension has been completed, the slips may again be sorted by stores and the total value of each store inventory quickly computed by adding the amounts on the individual slips.

Still another method of making calculation easier and presenting the final results in more satisfactory form is the abstracting of all the inventories on a single sheet or series of sheets, in form similar to Fig. 19. This recapitulation sheet may

be used whether the individual inventory tags or the stock inventory sheets previously mentioned are used in listing the goods in the stores. In addition to the advantage of pricing and extending all stocks of the same article at the same time, this recapitulation furnishes a much more satisfactory permanent record and will bring under the scrutiny of the management the essential facts regarding the inventory more clearly than any other method.

BLANK STORES COMPANY

INVENTORY RECAPITULATION

Date________________

Description of Article		Unit of Meas.	Unit Price	Store No. 1		Store No. 2		Store No. 3		Store No. 4		Store No. 5		Store No. 6		Total	
Kind of Goods	Grade, Size, or Quality			Quan.	Value	Quan.	Value	Quan.	Value	Quan.	Value	Quan.	Value	Quan.	Value	Quan.	Value
Totals																	

FIG. 19.—Inventory Recapitulation.

This form may be used by the head office for listing and recapitulating the retail store inventories. The quantity figures for each store will be taken from the individual inventory tags or sheets. The unit price of each item will be set by the head office and the values will then be extended and entered in the proper columns. Showing all the goods of one kind on the same line will make the summary more intelligible, as well as facilitating the clerical work of extending the values. When complete, the report will show the total quantity and value of each class of goods and also the total inventory of each store in the chain.

Valuing Inventories.—It has been taken for granted in the preceding discussion that the work of counting and listing the goods will be done in the stores, with the work of pricing, extending, and checking, etc. reserved for the head office. The entire work of inventory taking will be under head office supervision and it may even be deemed advisable to have employees from the head office act as the inventory takers. In some large organizations the inventory problem is so great that a selected group of employees are engaged all the time on inventory work.

The question of the basis on which goods are to be priced is one which often causes considerable trouble. The old rule of the accountants is cost or market, whichever is lower. Volumes have been written on this subject also, and it would be superfluous to attempt here to advance the arguments for and against this basis. It will suffice to state that there is a well-defined tendency

in retail store accounting in some types of enterprise to adopt a basis of current market cost price, without immediate regard to original cost.

This price basis has the advantage of being easy to arrive at, whereas the determination of original cost may be an exceedingly troublesome matter. Where stocks turn over rapidly—and this is the case in many chain store enterprises—there is likely to be no substantial variation between original cost and current market price on 90 per cent of the goods in stock. Frequently, too, the actual cost of an article cannot be determined where changes in its form have taken place since it was purchased. If the use of the market price basis means anticipating profits on goods not yet sold, it is ordinarily to be avoided, but where no substantial error in this direction is likely, the method will prove a great time saver and will give a concrete idea of the current value of the inventory.

Some enterprises use retail selling price as a basis for valuing inventories. To avoid anticipating a profit on goods not yet sold these selling prices must be reduced by the percentage of mark-up originally applied to them, thus approximating cost. The use of this method is further considered in Chap. VIII.

One of the troublesome features of pricing an inventory is to arrive at a satisfactory valuation for damaged and obsolete stock. If such goods are taken at the full price, the inventory will be overstated and a false estimate of its worth will be made. On the other hand, if these goods are included in the inventory at a depreciated or reduced value, or even omitted altogether, the effect will be to burden the cost of goods sold with the amounts paid for items which were never actually disposed of. This is inevitable because of the method of arriving at cost of goods sold,—*i.e.*, deducting the closing inventory from the total purchases.

Naturally, any goods lost, destroyed, or stolen will also be charged up as part of the cost of goods sold. The gross profit figure will then appear to be not simply the excess of revenues realized over the cost of goods sold, but will be reduced by the cost of other goods which have disappeared or so deteriorated as to become valueless. This fundamental objection to the periodic inventory method has been previously stated and is of obvious force. It can be eliminated only by the maintenance of a separate record of all goods lost, destroyed, or seriously damaged,

and the recognition of this expense through special bookkeeping entries.

The work of pricing and extending an inventory is arduous and often badly handled. The customary practice is to have each extension and footing checked for errors, but, since the checker is often no more reliable than the original calculator, there is some doubt as to the value of this procedure. Probably a general scrutiny of the prices, extensions, and footings, by a responsible member of the accounting department force, who will examine them from the standpoint of their reasonableness, will do more to eliminate mathematical errors than perfunctory routine checking. The employment of mechanical labor-saving devices, such as adding and calculating machines, is of tremendous advantage from a standpoint of accuracy as well as time economy. The logical grouping and arranging of the items before the calculations are made is also an inestimable aid to securing prompt and accurate inventory figures.

All sorts of "short cuts" in inventory taking and valuation are in use. One method adopted by some stores is to group all articles simply according to their selling prices. The inventory then consists merely of a list recording "so many items at 10 cents each, so many items at 12 cents each, etc." An inventory may be taken rapidly by such a method but the result has obvious deficiencies from the managerial standpoint.

Use of Estimated Inventory Valuations.—It was stated in a preceding section that some method of strengthening and reinforcing a simple periodic inventory is necessary to the exercise of any real supervision and control over the merchandise stock. The absence of any safeguard or protection for the goods has been emphasized. Unless the management has some means of estimating more or less accurately what results should have been obtained in a given period from the handling of the merchandise purchased, there is no means of ascertaining whether the figures obtained in the periodic inventory are correct or whether there is any serious element of loss from shrinkage or theft in the handling of the merchandise.

To obtain an estimate of the cost of goods actually sold, it is necessary to deduce something from the record of sales. If there is available a complete analysis of the sales by products or articles handled, the actual cost of these articles may be determined and proved against the cost of goods sold as calculated from

the periodic inventory. This, however, is essentially the detailed analysis method, the limitations of which have been indicated. Where there is no detailed analysis, however, it may be possible to determine from the record of sales approximately what the goods must have cost, provided it is known what margin of profit or mark-up is being realized on the various articles which go to make up the stock in trade.

This plan of calculating the amount of inventory and the cost of goods sold from the available information as to the gross margin realized requires a greater knowledge of operations and a more intensive analysis of the stock handled than is ordinarily met with in a store where the periodic inventory method alone is depended upon for profit and loss figures. The problem would be simple if all goods were marked up to the same extent, but this is seldom the case. Where the extent of the mark-up varies, the average for the store as a whole must be determined from a knowledge of the proportion of total sales which is borne by articles of the various gross margin percentages. In other words, some sort of composite average mark-up must be arrived at by giving appropriate weight to the various articles making up the stock in trade.

The manner in which such a composite mark-up figure may be arrived at is indicated by the form in Fig. 20. This form is obviously suggestive rather than susceptible of application to any individual set of circumstances. Its use will be facilitated if the sales of the store are reported separately by departments, or groups of articles, the mark-up and rate of turnover of which are somewhat similar. Where such a preliminary or general analysis of sales is made, the estimated merchandise figures may be arrived at with less probability of error.

In practice, the method of reinforcing the periodic inventory plan of determining cost of goods sold operates about as follows. From past experience and intelligent consideration of present circumstances it may be determined, for example, that the average gross margin to be realized in a given department or on a given group of articles is, say, 24 per cent of the sales price. It may then be estimated that the cost of goods sold during the period is approximately 76 per cent of the reported sales revenue for that department. If, then, the cost of purchased goods delivered to that department be added to the inventory of that department at the beginning of the period and the above

estimated cost of goods sold be deducted from this total, the remaining balance should correspond with the valuation of goods remaining on hand, as determined from the physical inventory taking place at the close of the period.

If a substantial discrepancy between the estimated and actual closing inventory figures is revealed, it indicates either that the estimate of gross profit is incorrect or else that there is some factor in the situation which is not being taken into account. If the

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CALCULATION OF AVERAGE GROSS PROFIT MARGIN

Data for Period from __________ to __________

Stores Nos. __________

Description of Goods Delivered to Stores	Total Cost		Percent. of Mark-up Over Cost	Estimated Total Mark-up		Estimated Total Sales Value	
Totals							

Percentage of Total Estimated Mark-up to Total Cost ______; to Total Estimated Sales Value ______

FIG. 20.—Calculation of Average Gross Profit Margin.

This form may be used in calculating the average gross profit margin which should be realized by the retail stores. The figures in column 2 represent the cost of merchandise delivered to the stores in a given period and are determined by analyzing the merchandise accounts of the stores. In this analysis the goods will be divided into groups having the same percentage of mark-up added in fixing the retail selling price. By applying these percentages the total mark-up and the estimated total sales value for each group of goods can be determined. The total of column 4 will then show the weighted average mark-up (or gross profit margin). The percentage of this profit to the cost will be found by comparison with the total of column 2; percentage to sales by comparison with column 5. By use of these percentages, inventories can be estimated with reasonable accuracy.

physical inventory comes out short of the estimated figure and the gross margin of profit has been carefully estimated, the logical assumption is that goods are being lost, damaged, or permitted to deteriorate.

Just what use is made of these estimated inventory figures in the head office will be determined largely from the frequency of the actual physical inventories and the general accuracy of the estimates. Where the estimated inventories and cost of goods sold are close to the actual figure, and where physical inventories

are taken only at considerable intervals, it may be deemed advisable to prepare journal entries and give expression on the books of account to the estimated inventory figures and the corresponding estimated cost of goods sold. In general, however, it will probably be found more satisfactory merely to use these estimated figures for such financial statements and reports as are prepared in the interim between actual physical inventories. A great deal of confusion may be created in the formal books of account by the introduction into them of estimated figures which later require corrections of large amount.

Reports of Lost, Damaged, and Transferred Goods.—In conjunction with such a plan of estimating inventory it is necessary

BLANK STORES COMPANY

REPORT OF MERCHANDISE LOST AND DAMAGED

Report Number

Period Ending ____________

Store No. ____________

To Head Office: For the reasons noted, we have been compelled to remove from our stock of salable merchandise the items listed below:

Quantity	Kind of Goods	Explanation of Loss	Disposition of Goods	For Head Office	
				Unit Price	Value
			Total Value		$

Signature of Store Manager ____________

Fig. 21.—Report of Merchandise Lost and Damaged.

This form will be used by the retail store manager to report merchandise losses due to spoilage, breakage, shelf wear, etc. The manager will make a memorandum of each loss as it occurs and will submit this report once a week, or once a month, so that the head office may reduce his "Merchandise Inventory" account by the amount of the loss. The total of the "Value" column will form the basis for a journal entry, as indicated in the concluding paragraphs of this chapter.

to have some sort of report from the store of goods known to have been lost to the stock through one cause or another. The sources of loss encountered differ with the types of commodities handled, but a report similar to that indicated in Fig. 21 may answer the purpose. The known losses shown by such reports will be taken into consideration by the head office in arriving at the estimated closing inventory figures. Similar allowance must be made

for goods marked down to lower prices on account of damage, deterioration, and obsolescence which are recognized in the closing physical inventory.

Another not uncommon type of transaction, which must be recognized in connection with this or any other system of merchandise control, is the transfer of goods from one store to another. Where such transfers take place, prompt notification must be given to the head office, so that the store transferring the goods may be relieved of responsibility for them and the store receiving them duly charged. In Fig. 22 is indicated a form of transfer slip which may be used to record such trans-

BLANK STORES COMPANY

MERCHANDISE TRANSFER REPORT

From Store No. ______ to Store No. ______

Date ____________________

Report Number

To Head Office: The following merchandise has today been transferred between the stores noted above:

Quantity	Kind of Goods	Reason for Transfer	For Head Office		
			Unit Price	Value	
		Total Value		$	

Signature of Store Manager
Transferring Goods ____________________
Receiving Goods ____________________

FIG. 22.—Merchandise Transfer Report.

This form will be used for notifying the head office of all merchandise transferred from one store of the chain to another. The form will usually be made out in duplicate; the manager who transfers the goods will send one copy direct to the head office, while the manager who receives them will sign the other copy and send it to the head office as an acknowledgment. The total of the "value" column will form the basis of a journal entry crediting one store and charging the other, as indicated in the concluding paragraphs of this chapter.

actions. Various means of preparing and handling this sort of slip are in force, but it is generally provided that the slip be prepared in duplicate, one copy being sent to the head office by the store transferring the goods, the other copy eventually being returned to the head office also, after passing through the hands of the store manager who receives the goods.

If the number of transfers is small, a journal entry may be made for each slip. If transfers are numerous, it may prove desirable to recapitulate the amounts after the slips have been priced and extended, and to prepare a single journal entry at the end of the accounting period. By this entry the net charge or credit to each store in the chain is expressed on the books of account.

Bookkeeping Entries.—The bookkeeping entries required to express in the accounts the facts shown by periodic physical inventories are briefly indicated below. The form of these periodic entries will differ according to the treatment of the merchandise accounts, as noted previously on page 62. In case the ledger contains an account known as "Merchandise Purchases," which is carried primarily as a profit and loss account and from which the inventory element is to be separated, the entry for setting up the physical inventory valuation will be in the following form:

Dr. Merchandise Inventory—Store No. 1	$xxx	
Merchandise Inventory—Store No. 2	xxx	
Merchandise Inventory—Store No. 3	xxx	
etc.		
Cr. Merchandise Purchases—Store No. 1		$xxx
Merchandise Purchases—Store No. 2		xxx
Merchandise Purchases—Store No. 3		xxx
etc.		

The balance remaining in the "Merchandise Purchases" account, after the inventory element has been removed, will presumably represent the cost of goods sold during the period. This balance, as indicated in a later chapter, will be transferred to a profit and loss summary account.

In the above entries and in the discussion which has preceded them, the problem of an opening inventory has been largely ignored. It is obvious that the goods on hand in a store at the beginning of a period bear the same relation to future operations as subsequent purchases. In other words, if the "Merchandise Purchases" account is used in the manner indicated above, it must not only be relieved of the element of closing inventory but also be charged with the element of opening inventory. At the beginning of any period, then, an entry must be made in the following form:

Dr. Merchandise Purchases—Store No. 1	$xxx	
Merchandise Purchases—Store No. 2	xxx	
Merchandise Purchases—Store No. 3	xxx	
etc.		
Cr. Merchandise Inventory—Store No. 1		$xxx
Merchandise Inventory—Store No. 2		xxx
Merchandise Inventory—Store No. 3		xxx
etc.		

This entry will, in effect, be a reversal of the entry by which the closing inventory of the preceding period was set up. The "Merchandise Inventory" accounts become merely temporary accounts set up at closing dates for the purpose of separating the amounts representing goods on hand from those representing goods which have been sold during the period.

If the balance of the "Merchandise Purchases" account in the example given above is to be taken as cost of goods sold, it should first properly be relieved of the cost of any goods known to have been lost or damaged during the period. Provided this information is available (it may have been obtained from a form such as was shown in Fig. 21), an entry will be made in the following form:

Dr. Operating Expenses—Lost and Damaged Goods	$xxx	
Cr. Merchandise Purchases		$xxx

Similarly, goods transferred between stores must be recorded by journal entry, a transfer from store No. 1 to store No. 2 being indicated as follows:

Dr. Merchandise Purchases—Store No. 2	$xxx	
Cr. Merchandise Purchases—Store No. 1		$xxx

It will be seen that when the account termed "Merchandise Purchases" is subjected to the treatment indicated above, it rapidly loses its character as a "purchase" account, and the title, therefore, becomes something of a misnomer. For this and other reasons it may be more satisfactory to adopt in its place an account of a different character, termed simply "Merchandise." This account will be considered as primarily an asset account, representing the stock of goods on hand. To it will be charged all goods received, and credited all goods sold or otherwise disposed of.

When the physical inventory is taken, it will determine the amount which should remain as a balance in this "Merchandise"

account. After other adjustments (such as those for transfers, lost and damaged goods, etc.), the balance actually in the account at inventory time must be reduced by transferring from it the cost of goods sold during the period. Concretely, if the net amount charged to the "Merchandise" account up to the closing date is $5,000 and the amount of the physical inventory is $2,000, it appears that the cost of goods sold is $3,000. This $3,000 will, accordingly, be transferred by an entry in the following form:

Dr. Cost of Goods Sold	$xxx	
Cr. Merchandise		$xxx

The accounts then bear their proper titles. The new account, "Cost of Goods Sold," is a nominal account, the balance of which will eventually be transferred to a profit and loss summary account. No temporary inventory accounts are required, as the balance in each "Merchandise" account after adjustments will represent the value of goods on hand at the closing date.

Further considerations which must govern the head office bookkeeper in connection with handling merchandise inventory entries are outlined in Chap. XIII.

CHAPTER VII

THE WAREHOUSE—PERPETUAL INVENTORIES

In the two preceding chapters the merchandise control problems of the chain enterprise of small or moderate size have been considered, where goods are delivered direct to the retail store outlets by the vendors from whom they are purchased. Where such conditions prevail, no uncertainty exists as to the allocation of the merchandise bought. The purpose of the accounting system, to show separately the operations and results of each unit in the chain, are easily served where no confusion can exist as to the items entering into the operations of each unit.

As the chain grows in size, embraces more units, and becomes less easily served by the ordinary means of direct delivery of goods, there arises a need for the establishment of some general stock of goods on which the stores may draw to supply deficiencies of their own stock more quickly than is possible if the goods must be secured from some outside dealer. In almost every such business handling staple commodities which can be purchased and stored for future consumption, a central warehouse stock of some sort becomes a necessity by the time the chain has come to embrace eight or ten retail store units.

The primary advantage of the central warehouse stock, as just stated, is that it makes available for the individual stores a far more complete line of merchandise than any of them could carry or promptly secure if no such stock existed. Stated in another way, this means that the investment of the business in merchandise can be concentrated in one stock which is available for the needs of all the stores, where an equally complete line of goods in each of the individual units would require a far greater aggregate stock and materially reduce the all-important rate of turnover. With an efficient interstore delivery service, the individual store may carry on its business with a comparatively limited supply of goods on its shelves and still not run the risk of being short of any particular article for more than a few hours at the most.

Another important advantage of maintaining a central warehouse is that the business may take advantage of reductions in price which can ordinarily be secured when purchases are made in large quantity. It is, moreover, often possible to buy goods in advance at times when seasonal fluctuations result in the lowest market price. The cash customer with available warehouse space can pick up bargains which would never come the way of the dealer who must buy, or at least accept deliveries, piecemeal.

Merchandise Control Methods Where Warehouse Is Maintained.—Where a central warehouse stock is maintained, the procedure in buying and handling goods is essentially different from that followed where deliveries are made direct to the stores. In general, all goods purchased will be delivered to the warehouse and the stores will obtain goods only from this central stock. Normally, there will be a few standard exceptions to this general rule—for example, in the case of certain perishable goods which will be delivered daily direct to the stores—but so far as all staple goods are concerned, no variation from the rule is expected.

Similarly, goods are purchased by the business for the general needs of the chain as a whole and usually not to fill the specific request of any one unit. Except as the requirements of some one store in the chain may differ from those of the other stores, a purchase order from the head office will be issued for a supply of goods which is expected to take care of the needs of all the retail outlets over a given period of time.

The purchasing agent of the business will be notified of the necessity of laying in a supply of a given commodity in one of two ways. If a well-ordered warehouse stock record system is in force, he will automatically be advised as soon as the available supply of a given commodity falls below a standard minimum quantity. Where an unexpected shortage develops, the subject will be brought before him through the failure of the warehouse to fill requisitions from a store for the article in question. In either case, he will consult the records to determine about what quantity will be required for future needs over a given period, and will place an order for replenishing the warehouse stock in accordance with these needs and the current state of the market for the commodity.

Where, in the case of direct purchases and deliveries, the process of placing goods in the stock of a retail store was single

and continuous, it now develops into an affair of two distinct steps. Ordering, receiving, and storing the goods in the warehouse is one, and transferring the goods from warehouse to store is another. An intermediate point has been introduced into the chain of transactions, which formerly continued without interruption from the origin of the demand in the store to the satisfaction of that demand by the delivery of the goods.

The new accounting procedure related to ordering and receiving the goods presents some differences as compared with that

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REPORT OF PROSPECTIVE SHORTAGES

IN WAREHOUSE STOCK

Date ________________

To Purchasing Agent: Warehouse stock of the following items has now fallen below the set minimum quantities to be kept on hand; kindly place order for additional goods:

Kind of Goods	Quantity Now on Hand	Set Minimum for Stock	Set Maximum for Stock	Average Quantity Sent to Stores Each Month	This space for use of purchasing agent		
					Ordered from	Purchase Order No.	Quantity Ordered

Signature of Warehouse Stock Clerk ______________________________

FIG. 23.—Warehouse Shortage Report.

This form will be used by the warehouse stock clerk to notify the purchasing agent that the stock on hand of a given commodity is running low. The report will be submitted daily, or whenever it is found that the quantity of a given item has reached the fixed minimum to be kept on hand. The purchasing agent will use these reports as a basis for placing purchase orders for a new supply of the commodity in question. When purchase orders have been placed and noted in the spaces provided on this form, one copy of the report may be returned to the stock clerk for his information.

described in the preceding chapter. The store requisition as a preliminary of the purchase order will no longer be used. Instead, there may be in use a form of report similar to that shown in Fig. 23, which will be sent by the warehouse to the purchasing department as notification that a prospective shortage exists and that it is desirable to replenish the stock. The completeness and accuracy with which this data can be furnished to the purchasing agent depend, of course, on the manner in which the warehouse stock records are maintained. The form presented in the

illustration has been drawn on the assumption that the data important to the purchasing agent may be readily secured.

On the receipt of such a notification, or whatever similar form takes its place, the purchasing department will issue a purchase order to the vendor of the goods. This purchase order will differ in no important particular from that shown in Fig. 13*a*, (mentioned in a previous section), except that the delivery instructions will show the central warehouse as destination of the goods instead of the individual retail stores. The handling of the various purchase order copies and the preparation of receiving slips or reports will also follow the lines previously indicated. Invoices from vendors will be received, approved, and placed in line for payment in the same manner. So far as receiving, checking, and placing the goods in stock are concerned, the warehouse will simply fulfil the functions previously indicated as devolving on the retail store manager.

It has been said that, where a warehouse is maintained, all goods bought should, theoretically, pass through it. If this were true, the change made in the voucher register (or purchase distribution record) would involve simply the elimination of all the merchandise columns for the individual stores, such as are shown in Figs. 16 and 17, also Fig. 32. In point of fact, however, there are almost always a few articles purchased which, for one reason or another, are delivered direct to the stores. For this reason it will ordinarily be necessary to retain the store merchandise columns in the voucher register, and also to add a column for the central warehouse merchandise stock. In some concerns no merchandise is charged direct to the stores but all is considered as theoretically passing through the central warehouse, even though delivered direct. This assumption seems to be unnecessary, unless there is in effect some method of charging goods to the stores at other than cost prices.

The merchandise stock, in which so much of the capital of the business is invested, is now in two locations of differing character. One of these is the retail store, where there is carried a comparatively small supply of goods, being disbursed rapidly but in small unit quantities to the consuming public. The other is the central warehouse, where a relatively larger supply of the goods is on hand and from which deliveries will be made only to the retail stores of the chain in accordance with a certain prescribed procedure. It may be assumed for present purposes that the han-

dling of and accounting for goods in the retail stores differs not at all from that outlined in Chaps. V and VI. In the treatment of the central warehouse stock, however, it is possible to take steps for obtaining more satisfactory information regarding the transactions which take place than can practically be obtained in the retail stores.

Use of Perpetual Inventory Records.—Where the detailed analysis of merchandise transactions was found in many cases to be impossible of application to the retail outlet, it is almost always feasible in the case of the central warehouse. Here, instead of the small individual sale taking place between a clerk and a customer, neither of whom have time for any superfluous record keeping, there takes place the filling of a relatively small number of formal orders, each describing definitely the goods to be disbursed, in such a manner that they can be readily identified for purposes of bookkeeping analysis. The elementary data for a complete set of warehouse stock records cannot fail to be available, and it is surprising only that so many concerns have neglected to utilize it to the fullest possible extent.

The uses of perpetual inventory records covering the merchandise stock in the central warehouse are readily apparent. In the first place, they furnish an invaluable guide to the purchasing department, by showing not only quantities on hand but also quantities consumed by the stores in a given period. In the second place, they provide a satisfactory check on the amounts distributed to the stores where there is any possibility of error in those figures from other sources. In addition, they make possible the rapid preparation of a statement of the value of the central warehouse stock at any given time without the necessity of frequent physical inventories to determine the financial position of the enterprise in this regard.

Building up and maintaining a detailed perpetual inventory record of goods in stock in the warehouse is not a complicated task, nor does it ordinarily require an excessive amount of clerical labor. The details of such a perpetual inventory are usually kept on cards in one of the standard sizes, the ruling of the card depending, of course, on the character of the goods making up the stock. The essentials, so far as the perpetual inventory feature is concerned, are columns for recording amounts received, amounts disbursed, and the balance or amount on hand. The date of each receipt or disbursement is customarily indicated, and

space may also be provided for a reference entry, indicating the voucher or purchase invoice number for goods received and the store order number for goods disbursed. At the top of the card will be the name of the article covered and such further particulars as its location in the warehouse, name of vendor from whom purchased, etc.

The simplest form of warehouse record card may be kept only in quantity, without reference to price or total value. An illus-

BLANK STORES COMPANY

WAREHOUSE STOCK RECORD CARD

Kind of Goods________ Grade, Size, Quality ________ Unit of Measure____

Location in Warehouse: Floor________ Section________ Bin ________

Purchases:
From________ Date Rec'd ______ Quantity______ Price______
From________ Date Rec'd ______ Quantity______ Price______
From________ Date Rec'd ______ Quantity______ Price______
From________ Date Rec'd ______ Quantity______ Price______

Date	Quantity			Date	Quantity			Date	Quantity		
	Received	Delivered	Balance		Received	Delivered	Balance		Received	Delivered	Balance

FIG. 24.—Warehouse Stock Record (Condensed).

This form may be used as a perpetual inventory record of the warehouse stock. The form may be printed on a 5 by 8 card, one card being used for each item of merchandise carried in stock. At the top of the card are provided spaces for showing the particulars for each lot of goods received, while the lower portion of the card records the quantities received, delivered to the stores, and on hand. This record does not show the aggregate value of the goods, but that can be determined from the quantity on hand and the cost price figures given above.

trated form for such a card covering a staple article is shown in Fig. 24. It is often desired, however, to have the stock record card carry further details as to unit prices and aggregate value of goods on hand. Another form of card making provision for some data along this line is shown in Fig. 25. It goes without saying that some types of commodities require a much more elaborate perpetual inventory record. Where it is necesasry for identification to record additional descriptive data—sizes in clothing and shoes, for example—the card will have to be designed specially to meet the needs of the business concerned.

BLANK STORES COMPANY

WAREHOUSE STOCK LEDGER SHEET

Kind of Goods________ Grade, Size, Quality________ Bought from ________ Unit of Measure________

Location in Warehouse________ Minimum Quantity for Stock________ Maximum Quantity for Stock________

On Order			Received							Delivered to Stores					Adjustments				Balance			
Date	P.O. No.	Quant.	Date	Rec. Rep. No.	Quant.	Inv. Cost	Frt. etc.	Total Cost	Unit Cost	Date	Store Order	Quant.	Unit Cost	Amount	Date	Reference	Quant.	Amount	Date	Quant.	Unit Pr.	Amount

FIG. 25.—Warehouse Stock Record (Detailed).

This form may be used as a perpetual inventory record where it is desired to keep full details of all merchandise received, delivered, and on hand, together with its value. This stock ledger sheet shows the date, reference, quantity, unit, and total cost under each section of the record. A ledger made up of these sheets will support the "Warehouse Merchandise Inventory" control account and will be kept in balance with the latter by entries in the "Adjustments" column whenever they are required. Quantities on order as well as those on hand will also be shown on this sheet, so as to furnish complete information regarding the status of the stock.

Posting of these stock record cards is accomplished by a clerk through whose hands will pass all vendors' invoices for merchandise (or the receiving reports corresponding with such invoices) and also all orders filled from the warehouse stock for the individual stores. Usually no extra copy of the receiving report is necessary for this purpose, as one of the ordinarily required copies may simply be routed so as to pass across the stock record clerk's desk. The store order is discussed further in the following section.

Orders from Store to Warehouse.—When merchandise is required by the retail stores, it will be requisitioned from the central warehouse on an order blank which will differ materially from any form previously described. While the transfer of goods from the central warehouse to one of the stores is a purely intra-company transaction, its particulars must be fully recorded if any information is to be available regarding the performance of an individual store unit. The merchandise stock in the warehouse has been placed under control and it cannot be permitted to pass from under that control without responsibility for its further disposition being properly placed.

Such a store order form will be designed by each enterprise with the utmost attention to economical handling throughout its course. In order to reduce to a minimum not only clerical but manual labor connected with the filling of these orders, the size, shape, color, ruling, etc. must be selected with due consideration for each step in handling the order in store, warehouse, and office.

As a first measure of economy, the order blank will ordinarily be prepared with a number of copies—probably three or more. Where a standard line of staple articles is carried, the names of as many of the goods as possible will be printed on the order form, with blank lines left only for special or exceptional articles. Symbols will be used in place of lengthy descriptions where economy may be effected by this means. The printed items will be arranged on the form in such order as to facilitate "order picking" in the warehouse. Several sheets may be used where the warehouse contains various departments or floors. Where all the items must be written in by the store manager, he will be given instructions as to arranging the items properly on the order blank, so as to secure most efficient handling in the warehouse.

Usually the order blank is made out by the store manager and sent in to the head office by a truck driver or collector. In some

cases, however, the store manager may place his orders by telephone. At a designated hour he will call up either the head office or warehouse and an order clerk will write out the order from the store manager's verbal instructions.

The illustration in Fig. 26 will indicate the probable appearance of the order. If the store manager makes out the form, it will be prepared in triplicate, two copies being sent to the warehouse while the third copy is retained by the store. Order pickers in the warehouse will carry with them one or both of the copies sent to

BLANK STORES COMPANY

MERCHANDISE ORDERED FROM WAREHOUSE

Store Order Number

FOR STORE NO. ______

Date ____________________

To Central Warehouse: Please deliver at once the following merchandise:

Goods Wanted (store manager fills in)		Goods Delivered (warehouse fills in)		Value (Head office fills in)	
Quantity	Kind of Goods	Remarks	Quantity	Unit Price	Amount
			Total Value		$

Signature of Store Manager { Order Approved ____________________
Goods Received ____________________

FIG. 26.—Store Order to Warehouse.

This form may be used by the retail store manager in ordering goods from the central warehouse. He will indicate in the first two columns what goods are wanted. The warehouse manager will enter in the fourth column the quantity actually delivered, noting in the third column the reasons for any shortages, substitutions, etc. When the order has been filled, one copy will go to the warehouse stock clerk, who will enter on his stock records the quantities delivered. He will also enter on this store order form the unit price of each article. The accounting department will then extend the values, the total value eventually being credited to the "Warehouse Merchandise" account and charged to the "Retail Store Merchandise" account. The store manager will sign the order before sending it in and will again sign one copy as a receipt when the goods are delivered from the warehouse.

the warehouse, and will note, as the order truck or box is filled, the quantities which are being supplied in response to those called for by the store. Special notations may be inserted as to shortages, etc.

If the system of filling orders does not make provision for the order pickers entering information on both copies of the order, the "checker" who recounts the items before shipment will see

that the quantity delivered is entered on the second copy before the shipment leaves the warehouse. The original of the order blank will then accompany the goods to the store, where it may be receipted and returned to the head office or left for the information of the store manager.

The second copy of the order will be utilized by the stock record clerk for entry on the perpetual inventory cards previously discussed. After these entries have been made, the stock clerk will enter on the order the unit cost prices of the goods. The form will then be forwarded to the head office accounting department to furnish the information necessary for charging the retail store and crediting the warehouse stock for the goods delivered on the order. This accounting department copy—shown in Fig. 26—will be provided with spaces for pricing and extending each item, so that on completion the form will constitute an invoice for the goods and may be entered accordingly on the company's records.

Pricing Store Orders—Summarizing Transfers.—The problem of pricing the goods delivered to the retail stores is often a troublesome one. The natural procedure would seem to be to bill the goods to the stores at their exact cost, in order that the warehouse stock may be relieved of its charge on the same basis that the charge was originally made. Cost in this case would include in-freight charges as well as the vendor's price. If such a plan is followed, there should be no margin of profit or loss indicated in such a transaction and this, of course, corresponds with the facts. Other elements, however, enter into the situation and sometimes make desirable another method of treatment.

The process of warehousing and redelivering merchandise to the retail stores involves a certain amount of expense. The question arises as to whether this expense is not in reality a part of the cost of the goods as finally placed in the retail store. It may be contended that the goods should be charged to the stores at such a price as will cover not only their original cost but also the cost of this storing and handling. If this theory is adopted, there may be some new basis of pricing which will add to the original or prime cost a percentage or unit amount which will wholly or in part compensate for warehouse and delivery expense.

A still further effort has been made by some concerns to calculate the savings attendant on operation of a central warehouse by billing the stores at the current purchase price of the goods when they are requisitioned by the stores, quantity discounts being

eliminated. Theoretically, this procedure should measure the profit or loss sustained through buying large quantities in advance. As a practical proposition, this procedure does not always prove satisfactory, because of complications which are apt to cloud the issue and invalidate the results. Some further attention is given to these problems in a later chapter.

Still another method of pricing goods for purposes of billing from warehouse to store is the adoption of the retail selling price of the article as a basis. This is an altogether different and radical departure from the other modes of treatment and receives separate consideration in Chap. VIII.

Since the amounts charged to the stores for goods delivered from the warehouse do not actually constitute liabilities to be settled in cash, the intracompany invoices prepared as above

BLANK STORES COMPANY

RECAPITULATION OF WAREHOUSE DELIVERIES TO STORES

Period Ending ____________

Date	Store Order No.	Credit Warehouse Merchandise	Charge Retail Store Merchandise							
			Store No. 1	Store No. 2	Store No. 3	Store No. 4	Store No. 5	Store No. 6	Store No. 7	Store No. 8
Totals for Period										

Fig. 27.—Recapitulation of Warehouse Deliveries to Stores.

On a form of this kind may be recapitulated the totals shown by store orders of the sort illustrated in Fig. 26. Each store order will be given one line on this form, the total value of the merchandise delivered being entered as a credit to the warehouse in the third column and a charge to the store receiving the goods in one of the columns at the right. At the end of the period the totals of this recapitulation will form the basis for a journal entry, as indicated in the concluding paragraphs of this chapter. A similar form, for use where there is a different basis for pricing goods delivered to the stores, is shown in Fig. 37.

indicated cannot, of course, be entered in the voucher record, through which outside purchases have been distributed. The aggregate value of a given bill of goods simply constitutes a measure of the amount by which the warehouse is to be relieved of responsibility for the goods and the individual store to be correspondingly charged. There takes place, in other words, simply a transfer from the "Warehouse Merchandise" account to the "Store Merchandise" account.

Since it is superfluous to prepare a separate book entry for each transaction, the procedure will ordinarily be to carry a recapitu-

lation sheet having a column for each store in the chain. On this recapitulation will be entered in the proper column the amount of every warehouse invoice to the retail stores. At the end of the monthly or other accounting period the column totals will be taken as a basis for the transfer entry. An illustration of such a form is given in Fig. 27.

When the value of the goods being drawn from the warehouse stock is thus constantly recorded, it will be seen that there is always available the closest obtainable estimate of the value of the stock remaining on hand in the warehouse. In other words, so far as the merchandise in the warehouse is concerned, there is maintained a perpetual inventory in the aggregate as well as in particular. The balance of the "Warehouse Merchandise" account, after charging to it all purchases and crediting to it all shipments to the stores, should represent the total value of the goods in stock.

In support of this total figure there should always be available the evidence of the individual stock record or perpetual inventory cards. These cards constitute something in the nature of a subsidiary ledger, proving the correctness of a control account. If the quantities indicated are extended at the unit cost price, the total should correspond closely with the balance of the "Warehouse Merchandise" account. If this card record of the stock be accurately maintained and frequently balanced against the inventory control, the necessity of frequent physical inventories is almost eliminated. In fact, it may not be necessary to take a complete physical inventory at any one time, for by selective tests, or a continuous process of verifying quantities actually on hand with those shown at the same time by the stock record card, the accuracy of the records may be satisfactorily maintained without the confusion and extra labor incident to a complete physical inventory taken between two business days.

Under the form of procedure above outlined there is assumed a combination of two methods of merchandise control referred to in the opening paragraphs of Chap. V. The accounting, so far as the retail stores are concerned, still proceeds on the periodic physical inventory basis. The stock in the central warehouse, however, is accounted for under the detailed analysis or perpetual inventory method. This combination often affords a practical solution of the accounting problems in connection with merchandise control. Obviously, either of the two methods may

be extended both to the warehouse and the stores, but the conditions under which they operate in most cases make the one more adaptable to a central stock and the other the only practical plan for a retail establishment. The third or retail price inventory method is considered in the next following chapter.

Bookkeeping Entries.—Introduction of the central warehouse into the scheme of things, while involving a very considerable amount of additional clerical labor, introduces in the final analysis only one additional step in the general ledger bookkeeping—provided, that is, that goods are invoiced to the retail stores at the original cost price. The voucher register, revised to include a column for the merchandise stock of the central warehouse, will be summarized in such form as to give rise to an entry something like the following:

Dr. Merchandise—Central Warehouse	$xxxx	
Merchandise—Store No. 1	xxxx	
Operating Expenses (in detail)—Store No. 1	xxxx	
Merchandise—Store No. 2	xxxx	
Operating Expenses (in detail)—Store No. 2	xxxx	
etc.		
Cr. Vouchers Payable		$xxxx

The charges to the merchandise accounts of the individual stores will be limited to those covering goods delivered direct to the stores and not handled through the central warehouse.

When the total value of goods transferred from the warehouse to the individual stores has been determined from the recapitulation or summary illustrated in Fig. 27, a journal entry will be made in the following form:

Dr. Merchandise—Store No. 1	$xxxx	
Merchandise—Store No. 2	xxxx	
Merchandise—Store No. 3	xxxx	
etc.		
Cr. Merchandise—Central Warehouse		$xxxx

The form of this entry is given on the assumption that goods are being billed at cost. If the billing from the warehouse to the stores is made on any other basis, a slightly different treatment will be required, as indicated in Chap. X.

The entries giving effect to the periodic physical inventories in the retail stores will differ not at all from those presented in the concluding paragraphs of Chap. VI. In so far as the inventory of the central warehouse is concerned, there should theoretically

be no entry required, as the constant transfer from this account of the value of goods delivered to the stores will keep the balance in agreement with the value of the stock on hand. Actually, of course, physical inventories will disclose some variation due to errors, shrinkage, and other causes. When it becomes necessary to adjust the "Central Warehouse Merchandise" account because of such discrepancies, another journal entry will be made, ordinarily in the following form:

Dr. Operating Expense—Shrinkage in Warehouse Stock.....	$xxxx	
Cr. Merchandise—Central Warehouse..............		$xxxx

The above entry assumes that the physical inventory reveals a shortage in the quantity represented by the book account as being on hand. If an overage existed, the entry would be reversed, but, needless to state, an inventory shortage is met with far more frequently than a discrepancy of the other kind.

Transfers between stores, loss and shrinkage within a store, and other occurrences will be recorded in the accounts just as indicated in the preceding chapter. Where transfers take place frequently, it may be the policy to issue a regular billing on them and summarize them along with the merchandise shipped from the central warehouse, but this is ordinarily unnecessary.

CHAPTER VIII

PERPETUAL INVENTORIES AT RETAIL PRICES

At the outset of this discussion concerning the problems of what has been rather loosely termed "merchandise control" it was stated that there were three possible methods of exercising such control, and accounting (in the literal sense of the word) for the goods purchased for the stock in trade of a chain store enterprise. The method of periodic physical inventory—determining the current status of the merchandise stock, and, from that, the history of the merchandise transactions during the preceding period—has been quoted as one possible mode of procedure, although it is notably lacking in genuine control features. The advantages and limitations of the detailed analysis method have been considered, and the wide opportunity for its use in connection with accounting for the central warehouse stock has been emphasized. There remains for examination a third form of accounting procedure, in which the element of control predominates and which is utilized extensively where a practical plan for preventing merchandise losses through carelessness or dishonesty is the chief requirement of the management.

Characteristics of the Method.—This type of system for merchandise accounting has been designated as the "retail price inventory" method. Briefly, it involves carrying a record of the merchandise stock of each store at the aggregate retail selling price expected to be realized from the ultimate sale of that stock. Its use is obviously limited to enterprises in which the retail selling price of every article is determinable at the time the article is delivered to the store. If for any reason this retail price cannot be determined—as, for example, where the goods go through a quasi-manufacturing process before disposal—it becomes impossible to adapt this type of method to the situation.

The advantages to be gained from adoption of the procedure mentioned will become apparent when the inherent difficulties of merchandise control are carefully considered. All the facts regarding merchandise which is bought can ordinarily be deter-

mined by the head office with little difficulty or expense. Where, however, sales in the retail stores take place rapidly, with small quantities involved, there is little time for recording the facts regarding the merchandise which is sold. Lacking an analysis of the sales in terms of commodity and quantity, the accounting department is soon at a loss in its endeavors to keep informed on the value of the merchandise stock on hand and the cost of the goods which have been sold.

In many cases where the store conditions mentioned prevail—the dry grocery or tea store is a prominent example—practically the only information regarding the goods sold which can readily be furnished daily by the store is their aggregate retail selling price. This being true, there naturally suggests itself the possibility of translating the records of merchandise delivered to the stores into the same terms. If from the amount of goods delivered to a store, expressed in terms of their retail selling price, there be deducted an amount of goods sold by the store, expressed in the same terms, the balance will represent the retail sales value of the goods remaining on hand. In other words, if it is impossible to convert the valuation of goods sold into terms of their cost, the same purpose may perhaps be served by converting the valuation of goods purchased into terms of their selling price.

The primary requirement that goods be handled from warehouse to ultimate consumer without change of form or identity has already been mentioned as essential to the use of the system. It will be apparent also that another essential is a uniform and comparatively stable scale of selling prices. If the selling price is to be made the measure of valuation, the plan will occasion more labor than it saves if prices are variable and fluctuating. Every mark-up or mark-down in the selling price of any article must be recorded promptly and the records covering the current stock of that particular article must be promptly changed to avoid invalidating the results obtained from the system.

Operation of the Plan.—The actual operation of the plan will proceed along the following lines. The office copy of the store order to the warehouse, instead of being ruled as indicated in Fig. 26, will carry an extra set of columns for extending the retail selling price of each article, as shown in Fig. 28. When the accounting department figures the order for the purpose of charging the retail store, each item will be calculated first at the cost price and second at the retail selling price then prevailing.

It was indicated in Chap. VII that the "Warehouse Merchandise" account would be credited with all merchandise disbursed, valued on a basis of the original cost. This portion of the procedure must necessarily be retained; the "Warehouse Merchandise" account has been charged at the invoice cost and must be relieved of charge on the same basis. Under the present plan, however, the retail store "Merchandise" account is to be charged with the goods at their selling price, an entirely different figure. There enters into the calculations at this point, therefore, the selling margin or gross profit which must be somewhere disposed of in the accounts. What to do with this margin—a profit as yet unearned through actual sale of the goods—becomes one of the

BLANK STORES COMPANY

STORE ORDER TO CENTRAL WAREHOUSE

Store Order Number

STORE NO. ____

Late ____

To Central Warehouse: Please deliver at once the following merchandise:

Kind of Goods	Quantity Wanted	Quantity Shipped	Value at Cost		Value at Selling Price	
			Unit Price	Amount	Unit Price	Amount
	Total Values			$		$

Signature of Store Manager } Order Approved ____ Goods Received ____

FIG. 28.—Another Form of Store Order to Warehouse.

This form is handled like the one illustrated in Fig. 26, except that the value of the goods delivered to the stores is figured both at cost and at retail selling price. The total value at cost is used to credit the "Warehouse Merchandise" account, while the total value at retail selling price is used to charge the store "Merchandise" accounts, the latter being carried at retail values. These store orders may be recapitulated on some form similar to Fig. 27, although it will be necessary to provide an additional column for entering the difference between the cost and selling price, as noted in the text.

principal accounting problems where the retail price inventory method is in effect, as further noted below.

With all goods received by the stores charged to them at the retail selling price, it is only necessary to credit each store with the amount of its reported sales in order to strike a balance which should represent the retail value of the goods on hand at any time. If the items be set up in a regular "Merchandise" account, that account becomes a perpetual inventory at retail prices. It

is subject to verification at any time by a physical inventory, priced and extended on the same basis.

Such a physical inventory need not be taken at the end of an accounting period, since the balance is brought down to date daily as a result of each day's charges and credits. This fact, of course, facilitates inventory taking by making it possible to check up the value of goods on hand at any time, not merely on the last day of the week or month. The work of counting and recording the stocks of the various stores can be done at intervals throughout a period instead of being hastily rushed throughat some one, designated date. For control purposes, moreover it may be necessary to value the inventories only at the retail, selling price

BLANK STORES COMPANY

REPORT OF MARK-UPS AND MARK-DOWNS

STORE NO. ____________

Date ____________

Data Furnished by Head Office					Data Furn'shed by Stor Man.	Calculations Made by Head Office			
Kind of Goods	Selling Price per Unit		Price Change			Total Mark-up		Total Mark-down	
	Old	New	Up	Down	Quan. on Hand				
Totals									

Signature of Store Manager ____________

FIG. 29.—Report of Retail Price Changes.

This form may be used by the head office to notify the retail store manager of changes in retail store prices, and also by the manager to inform the head office what quantities he has on hand of each commodity whose price is being changed. On receiving the notice, the store manager will take a physical inventory of all the commodities affected, entering the quantity found to be on hand in the sixth column of the form. He will then return the report to the head office, where the total amount of the mark-up or mark-down will be calculated and his "Merchandise" account will be charged or credited accordingly.

which is much easier to arrive at than the cost price. For purposes of financial and operating statements, of course, the inventory should be reduced to the cost price basis.

There would be almost nothing to prevent the continued smooth operation of this system if retail prices on the various articles never changed. Prices do change, however, and every time there is even a minor increase or decrease, the perpetual inventory will be thrown out of line, unless steps are taken to correct the records. If, for example, goods originally valued at a

BLANK STORES COMPANY

RECAPITULATION OF PRICE CHANGE ADJUSTMENTS

Period Ending ____________

Date	Kind of Goods	Selling Price per Unit		Price Change		Store No. 1			Store No. 2			Store No. 3			Store No. 4			Totals		
		Old	New	Up	Down	Quan.	Total Mk-up	Total Mk-dn	Quan.	Total Mk-up	Total Mk-dn	Quan.	Total Mk-up	Total Mk-dn	Quan.	Total Mk-up	Total Mk-dn	Quan.	Total Mk-up	Total Mk-dn
Totals for Period																				

Fig. 30.—Recapitulation of Price Change Adjustments.

This form may be used by the head office to calculate and recapitulate the total mark-ups or mark-downs indicated by the reports from the stores, illustrated in Fig. 29. The quantities on hand in each store will be entered from the store report, and the total mark-up or mark-down can then be computed for all stores at the same time, with a considerable saving of clerical labor. One of these recapitulation sheets may be used for an entire accounting period, or a separate sheet may be employed for each set of price changes. The totals will form the basis for a journal entry as indicated in the concluding paragraphs of this chapter.

retail selling price of 10 cents are henceforth to be sold at 12 cents, it becomes necessary to increase the balance in the perpetual inventory account to the extent of 2 cents per unit on all such goods in stock at the time the price change is made effective.

This requires the closest cooperation between the head office and the retail store managers. The head office will, of course, furnish to each retail store a list of the prices to be changed each day. Immediately before the change goes into effect, the store manager must make an actual count of his supply of the articles indicated on the list and report back to the head office the quantities involved. Such a report may be furnished in the form indicated by Fig. 29. In this form spaces are provided for extending the aggregate mark-up or mark-down on each item, so that it is necessary only to foot the two total columns and from their difference determine the net increase or decrease to be made in the "Merchandise" account of the store. It will be seen that it may be possible to combine the price change list and price change report; this will be governed by individual requirements and preferences.

As in the case of calculating the value of physical inventories, it may be possible to save clerical labor in the head office, and also to minimize the possibility of error, by using a combined price change adjustment sheet, such as is indicated in Fig. 30. If such a sheet is used, it will be necessary for each store to report only the quantity on hand of each article whose price is being changed. When all of these amounts have been abstracted on the adjustment sheet, the respective mark-ups and mark-downs for the various stores can all be calculated at one time with a minimum of clerical labor.

Accounting Treatment of Retail Mark-up.—From the standpoint of the general accounting work, there now presents itself the same problem which was recognized in a preceding section. Here is a margin of increase or decrease in the value of the merchandise inventory charged to the individual stores. What disposition is to be made of this increase or decrease, and of the gross margin between cost and selling price which originally came into existence when the transfer of goods between warehouse and store was recorded?

There are several possible ways of dealing with the situation in the books of account. The first and simplest method of treatment probably has the least to recommend it. Under this plan,

which unfortunately has been adopted by a number of enterprises through seeming lack of knowledge of any preferable substitute, the margin between cost and selling price is treated as a gross profit immediately on delivery of goods from the warehouse to the store. The amount of the originally calculated profit is increased whenever any goods in the stores are marked up because of a change in the retail selling price, and decreased when any goods are marked down for similar or other reasons. Another adjustment necessarily has to be made in case discrepancies are revealed by a physical inventory.

The obvious weakness in this plan is that it brings onto the books of account an indicated profit where no such profit has, in fact, been realized. From the standpoint of the retail store, it is hardly to be considered that a profit has been earned until sale of the goods actually takes place. Before goods can be sold, certain expenses must be incurred for labor of clerks and managers, store rent, operating supplies, administration, etc. If the concern represents itself as having realized a gross profit in handling its goods before any of these expenses incident to sale of those goods have been incurred, it will be presenting an altogether incorrect picture of its financial status and actual net earnings.

This objection to the bookkeeping method described may be, in part, eliminated through the adjustment of the gross profit amounts set up for the estimated gross profit on goods not yet sold at the conclusion of an accounting period. In other words, if there has been set up the total gross profit to be realized on all goods delivered to the retail stores, this amount at the end of the period may properly be reduced by the proportion of that aggregate gross profit applying to goods not yet sold. Through an adjustment of this character, the value of the "Merchandise" accounts may be reduced to a cost basis. At the outset of the next following period the "Merchandise" account may then be restored to a selling price valuation and the amount of profit deferred will be carried into the current gross profit account. There are, however, less cumbersome and more satisfactory methods of accomplishing the same purpose, as indicated below.

A second method of handling the situation involves the creation of a reserve for unrealized profits, into which the gross margin will be carried at the time goods are billed from the warehouse to the retail stores. The amount of this reserve will be considered potential gross profit to be realized on the disposition of the goods.

From the continuing experience furnished by the daily calculation of comparative cost and selling price of goods shipped out to the stores, it will be possible to estimate the average percentage of gross profit on retail sales. This being the case, when the sales for a given day are known, the amount of gross profit earned that day can be closely estimated. This amount will then be transferred out of the reserve for unrealized profit and may fairly be considered an earned or realized profit.

If this plan is carefully followed, the balance in the reserve account at any time should accurately represent the amount of gross margin or profit which has been taken up in the merchandise accounts of the retail stores. If in preparing a statement of the assets of the concern these perpetual inventory accounts be reduced by the amount of the aforementioned reserve, the resulting figure should accurately represent the value of the goods in the stores on a basis of original cost. The total of mark-ups and mark-downs will, of course, apply as credits or charges to the reserve account, as they respectively increase or decrease the margin between original cost and retail selling price of the goods involved.

Both these methods, however, are open to an objection which may be rather important from a bookkeeping standpoint. If the various charges and credits necessary to record the changes and adjustments taking place under such an arrangement are carried into the ledger accounts, the figures representing the actual sales and merchandise deliveries to the various stores become obscured to such an extent that these essential facts may easily be lost to sight. For this reason it may easily prove desirable, to facilitate the bookkeeping work and render the ledger accounts more intelligible, to have all the calculation involved in carrying store inventories at retail prices set up in a separate collateral record.

This record will serve for preparing interim financial statements, proving the amount of an inventory at a given date, and similar purposes. In the general books, goods may be charged to the retail stores at the original cost price, just as has been outlined in Chap. VII. No ledger entries will be made of the amount of inventories until their value on a cost basis is determined by a periodic physical check, or by some other analysis which will give a satisfactory valuation for bookkeeping purposes.

The retail price inventory record may be kept on an ordinarily ruled sheet or on a specially prepared form like that illustrated

BLANK STORES COMPANY
RECORD OF RETAIL STORE INVENTORIES
(AT SELLING PRICES)

Period Covered	Items	Source of Data	Store No. 1	Store No. 2	Store No. 3	Store No. 4	Store No. 5	Store No. 6	Total
	Goods on Hand-Begin. New Period	Balance Forward							
	Add-Goods Delivered to Stores	Store Orders							
	Add-Mark-ups (or Deduct-Mark-downs)	Price Change Reports							
	Total Value	Total							
	Deduct-Goods Sold	Sales Reports							
	Balance-Goods on Hand Begin. New Period	Balance							
	Add-Goods Delivered to Stores	Store Orders							
	Add-Mark-ups (or Deduct-Mark-downs)	Price Change Reports							
	Total Value	Total							
	Deduct-Goods Sold	Sales Reports							
	Balance-Goods on Hand-Begin. New Period	Balance							
	Add-Goods Delivered to Stores	Store Orders							
	Add-Mark-ups (or Deduct-Mark-downs)	Price Change Reports							
	Total Value	Total							
	Deduct-Goods Sold	Sales Reports							
	Balance-Goods on Hand-Begin. New Period	Balance							
	Add-Goods Delivered to Stores	Store Orders							
	Add-Mark-ups (or Deduct-Mark-downs)	Price Change Reports							
	Total Value	Total							
	Deduct-Goods Sold	Sales Reports							
	Balance-Goods on Hand-Begin. New Period	Balance Forward							

FIG. 31.—Retail Store Perpetual Inventory Sheet.

This form may be used to maintain a perpetual inventory record where the concern does not wish to carry the values into the general books at retail selling prices. The inventory is kept up-to-date by continually adding the sales value of goods delivered to the stores (taken from the store orders), and deducting the total sales (taken from the daily sales reports), the necessary adjustments being made for mark-ups and mark-downs. These figures may be entered every day, once a week, or for any other period. The balance can be quickly brought up to any desired date for the purpose of comparison with the results of a physical inventory.

in Fig. 31. Pricing of the store orders is carried out in the same manner as indicated in a preceding section, but bookkeeping complexities are avoided through the simple day-to-day running balance record here suggested. Whenever a physical inventory is taken, an adjustment may be made in the balance shown for the store concerned and a new starting point thus obtained.

In the form suggested, space is provided for entering the net amount of mark-ups and mark-downs. This will be an addition if the net amount is a mark-up and a deduction if the net amount is a mark-down. In the latter case the item may be entered in red on the sheet to avoid confusion and will, of course, be deducted instead of added.

Advantages and Disadvantages of Method.—The advantages of the retail price inventory method have been briefly indicated above. As a safeguard against the loss of salable merchandise, it has proved a most satisfactory means of internal check. Barring inaccuracy in the calculations of the accounting department, there is practically no means by which merchandise can be lost, destroyed, stolen, or sold at incorrect prices without the discrepancy becoming apparent to the management at the first physical inventory taken thereafter in the store.

At the same time, any detailed records in respect of individual merchandise items handled are avoided. There is no necessity for sales slips or other means of analysis from the safeguard standpoint. The amount of clerical work involved can ordinarily be handled without much difficulty, unless the range of articles carried is too wide or the retail prices are constantly changing.

On the other hand, the method has numerous disadvantages. There is no provision for any sort of analysis of sales by types of product and no indication as to the source of a shortage if one occurs. Where the data is introduced into the books of account, the greatest care and intelligence is necessary in handling the entries if confusion is to be avoided. A bookkeeping force not familiar with the methods employed and lacking expert and painstaking supervision may easily become involved in a maze of adjustments and corrections which will cause so much clerical labor as to nullify the chief advantage of the system. Where it is feasible to subdivide the stores and stocks into departments, better results can be obtained, although this does not eliminate all the difficulties.

There is also hardly to be avoided a tendency to anticipate profits and to consider a profit realized at the time goods are delivered to the retail store, instead of at the time they are sold. The habit of stating and regarding store inventories at retail prices may lead to an inflated estimate of the worth of the goods. Even if it is agreed that the stock is worth what it will bring, it cannot be forgotten that expense is involved in disposing of the merchandise, and until that expense has been met it is improper to consider the goods as actually worth their retail selling price.

For goods handled and sold by units, package goods' and bulk goods where shrinkage does not have to be largely considered, the plan has highly recommended itself. The chain grocery has been previously quoted as a wide user of the method. It is difficult to conceive of its adaptation to a bakery, a restaurant, or a soda fountain. Some of the drug stores have tried it and entertain contradictory notions of its efficacy. In modified form, and within the limitations imposed by the circumstances, it has proved a most efficient safeguard for many classes of chain enterprise.

Bookkeeping Entries.—The entries appearing on the books of account as a record of merchandise transactions under the retail price inventory method will differ according to the manner in which the gross margin between cost and selling price is treated. In certain of the paragraphs above there were outlined three possible methods of handling this gross margin, the first of which was to take the amount up as a profit (subject to later adjustment) at the time the goods are delivered from the warehouse to the retail store. If this plan is adopted, the entry made to record the billing from warehouse to store will be as follows:

Dr. Merchandise—Store No. 1 (at retail)	$xxxx	
Merchandise—Store No. 2 (at retail)	xxxx	
etc.		
Cr. Merchandise—Central Warehouse		$xxxx
Gross Margin		xxxx

The amount charged to the store "Merchandise" account will, of course, be the selling price of the goods delivered; the amount credited to the warehouse "Merchandise" account will be the cost of those same goods, and the amount credited to the "Gross Margin" account will be the difference between the two.

Where goods are subsequently marked up, an entry will be made to increase the store "Merchandise" accounts by the aggregate amount of the mark-ups as follows:

Dr. Merchandise—Store No. 1 (at retail)	$xxxx	
Merchandise—Store No. 2 (at retail)	xxxx	
etc.		
Cr. Gross Margin		$xxxx

If goods are marked down, the entry will be exactly reversed:

Dr. Gross Margin	$xxxx	
Cr. Merchandise—Store No. 1 (at retail)		$xxxx
Merchandise—Store No. 2 (at retail)		xxxx
etc.		

When the amount of goods sold is reported from the stores, it will be carried directly into the "Merchandise" accounts instead of being credited to a separate sales account. The entry giving effect to such transactions is a modification of that shown at the end of Chap. III and, so far as its merchandise feature is concerned, may be summarized as follows:

Dr. Cash in Bank	$xxxx	
Cr. Merchandise—Store No. 1 (at retail)		$xxxx
Merchandise—Store No. 2 (at retail)		xxxx
etc.		

At the end of an accounting period, as previously noted, the store "Merchandise" accounts and the "Gross Margin" account will both be overstated by the amount of unrealized profit on the goods in stock. To adjust the book accounts to the proper figure, it is necessary to reduce the balance in both accounts by the amount of this unrealized profit. When the amount has been determined, an entry will be made in the following form:

Dr. Gross Margin	$xxxx	
Cr. Merchandise—Store No. 1 (at retail)		$xxxx
Merchandise—Store No. 2 (at retail)		xxxx
etc.		

This entry, of course, is of a temporary nature for purposes of closing the books at the end of the accounting period on the proper basis. When the next following period is begun, a reversing entry will be necessary; in other words, the store "Merchandise" account must again be increased to its full retail value and the amount of the gross margin carried forward as to be realized in the next period. The entry will, therefore, be:

Dr. Merchandise—Store No. 1 (at retail)	$xxxx	
Merchandise—Store No. 2 (at retail)	xxxx	
etc.		
Cr. Gross Margin (new period)		$xxxx

Any other adjustments of the amount of gross margin or store merchandise inventory will be carried through the books in the same fashion.

When the periodic closing entries are made, the final effect of this modification on the "Profit and Loss" account will be to make no change in the balance but to bring out a single figure representing "gross profit realized" instead of a credit for "sales" and a partially offsetting charge for "cost of goods sold."

In the entries above there has been mentioned a single "Gross Margin" account, but it is understood that there will be a separate record of the gross margin realized by each store unit in the chain. It is also understood that the total of the various transactions for an entire accounting period may be cumulated on a summary or recapitulation record of some sort and finally placed on the books of account in a single figure. Such procedure is identical with that outlined in previous chapters for other portions of the accounting work.

In case the second or reserve method of accounting is adopted, the entry to be made for recording transfer of goods from warehouse to store will be as follows:

Dr. Merchandise—Store No. 1 (at retail)	$xxxx	
etc.		
Cr. Merchandise—Central Warehouse		$xxxx
Reserve for Unearned Profit		xxxx

The entry for recording sales will be the same as that given in connection with the first method mentioned. If goods are marked up, the merchandise inventory and the reserve will both be increased by an entry of the following character:

Dr. Merchandise—Store No. 1 (at retail)	$xxxx	
Cr. Reserve for Unearned Profit		$xxxx

If goods are marked down, both accounts will be reduced by an entry of the opposite sort:

Dr. Reserve for Unearned Profit	$xxxx	
Cr. Merchandise—Store No. 1 (at retail)		$xxxx

When the profit actually earned has been determined, by calculating the gross margin realized on the known volume of sales, an entry for the aggregate amount will be made in the following form for each store unit in the chain:

Dr. Reserve for Unearned Profit..............................	$xxxx	
Cr. Gross Profit Earned..............................		$xxxx

Under this plan, the reserve account becomes a perpetual offset to the store merchandise inventory accounts, while the account entitled "Gross Profit Earned" is transferred at each closing date to the general profit and loss summary account.

Where the data in regard to store inventories at retail prices is carried in a collateral record, the entries placed on the books will not differ from those shown in the concluding paragraphs of Chaps. VI and VII. The store "Merchandise" accounts on the ledger will be carried at cost prices and will be adjusted only when the accountant has arrived at figures for the physical inventory, and corresponding cost of goods sold, which are satisfactorily accurate for general bookkeeping purposes. Sales will be carried in a separate "Sales" account and, regardless of how or when financial statements are prepared, the final closings will be made in the ordinary manner, as further outlined in Chap. XIII.

CHAPTER IX

OPERATING EXPENSES

Reference was made in an earlier chapter to the books of account as constituting an historical record. If this view of their function be taken, it will be seen that there are three principal elements which combine to make up the history of business operations in a retail store, or group of stores. The first of these is revenue derived from sales, the income on which the enterprise subsists. The second is the cost of the goods which are sold, and from which the revenue is derived. Between these two must lie a margin, usually called a "gross profit." From this gross margin or profit must be deducted the third element, the operating expenses which are necessarily incurred in the process of buying, storing, handling, and selling goods. The gross profit of a business cannot become the net profit of its owners until these operating expenses have been met.

It has been the intention to make clear in the chapters which have gone before, the manner in which the first two elements of this historical record of business operations are inextricably bound up with the material features of a merchandising enterprise—cash, charge accounts, and stocks of goods. In the buying and selling of merchandise, the management is concerned with very definite and tangible things, and the accountant, in extracting the history of those purchases and sales, must deal also with the physical conditions under which the various types of property are handled. When the subject of operating expenses is examined, it is found that here there is less of the physical and tangible to consider. The problem becomes one of analyzing and interpreting the effect of those factors which cause the enterprise to part with a portion of its gross profits before the final result of its operations can be determined.

General Problems Involved.—In the treatment of operating expenses there are found three general problems to be met by the accounting department: first, the classification or grouping according to type of expense; second, the method of recording

and distributing these expenses in the books of account; and, third, the allocation and division of the expenses incurred according to the periods during which are realized the benefits from the expenditure made.

Comparatively speaking, these are simple problems. Usually, there are few important questions as to the facts in a given case. With the facts known, the accounting treatment of the items becomes largely a matter of intelligent analysis and distribution in an economical manner.

As indicated above, the first problem to be considered is that of classifying expenses. It is not sufficient to consider all expenses as of the same character. Even in a comparatively small enterprise, it is important to classify the amounts expended so as to provide a more detailed picture of what is going on in each store. How this classification is to be made depends somewhat on the kind of store and the type of product handled. In any case the subdivision of expenses must be sufficiently detailed so that all significant factors will be shown, and at the same time be so condensed as to become easily grasped and carried in mind. Selection of the expense accounts to be used requires more thoughtful consideration than is sometimes accorded to the task.

Another point in connection with expense classifications which deserves emphasis is that of uniformity. The greatest value which expense reports have may easily rest in their susceptibility of comparison by periods, units, etc. Unless the expenses are grouped in the same manner for all stores and from one period to another, it will become impossible to develop any standards or pass intelligent judgment on one set of results with reference to others.

If the expense accounts are carefully selected at the outset, few changes should prove necessary. If changes are required, they should be effected by dividing a single account into two or more, or combining two or more accounts into one. Transferring a particular type of item from one account to another, or abandoning a certain method of grouping involving a number of accounts for another method developed along entirely different lines, should be avoided at almost any cost. Even a poor classification consistently followed is sometimes more useful than constantly changing groups, no matter how desirable a new classification may for the moment appear.

When the problem of classifying the operating expenses of a chain of retail stores is attacked, it is found that they divide themselves naturally into three groups. The first group includes the store expenses, those connected with the operation and maintenance of the retail establishments in the chain, the disposal of goods therein, and the collection of the revenues arising from their sales. The second group is made up of the expenses incident to storing and handling the merchandise which makes up the stock in trade, before and until it reaches the retail stores. These are usually termed "warehouse expenses" and "expenses of transportation"—sometimes, more briefly, "storage and handling expenses." The third group comprises the general administration expenses of the enterprise as a whole—those expenses incident to coordinating and unifying the operations of all units in the chain, without particular reference to the activities of any one of them. These expense groups are considered in order in the sections following.

Store Expenses.—The expense of operating the retail stores is ordinarily the largest and easily the most important of the three expense groups mentioned. The expenses of this group are allocated direct to the individual unit in which they have been incurred. Both absolutely and relatively these expenses should receive the closest scrutiny. The cost of operating a given unit and the proportion of that cost to the revenues and gross profits of the unit often become the principal criterion by which the performance of the store manager is judged.

Regardless of the type of product handled in the stores of a chain, there are certain expense classifications which will almost universally apply. A brief list is given below of those expense items which are most likely to require separate classification. These groups, with an additional one for all other store expenses, may fully answer the purpose, although there may be required additional classifications for recording special types of expense not common to all retail establishments.

These primary expense subclassifications for a retail store are as follows:

1. Wages of Store Employees
2. Rent of Store
3. Light and Power (also possibly Heat)
4. Wrappings and Containers.

5. Repair and Maintenance of Store Fixtures and Equipment
6. Insurance
7. Taxes and Licenses
8. Depreciation of Equipment
9. Lost and Damaged Goods.

An obvious addition to the groups mentioned will be an account called "Ice" (or "Refrigeration Expense"), in the case of stores handling food commodities of a perishable nature. If a delivery service is maintained, two further accounts will be required for "Delivery Wages" and "Delivery Expenses Other than Wages," the latter including operating supplies, maintenance, and depreciation incident to the use of delivery equipment. Where charge accounts are carried, recognition, however reluctant, is usually required for two additional classes of expense, "Bad Debt Losses" and "Collection Expenses."

Probably little comment is required on the allocation of expenses to the proper accounts in the above list. In practically all instances the title should make clear the character of the items to be included thereunder. A few notes on special points are, however, in order.

In the case of "Insurance," "Taxes," and "Depreciation" only such amounts will be charged directly to these accounts as have to do solely with store operation. This will include insurance on the stock of goods and on the store fixtures, local licenses and fees required for permission to operate the individual store, such property taxes as may apply to the investment in merchandise and fixtures at that particular location, and the estimated depreciation of fixtures and other store equipment. "Maintenance and Repairs" may optionally include such miscellaneous operating supplies as sawdust, soap, paint, shelf paper, and the like, although these items may be separately grouped under the heading of "Operating Supplies," if so desired.

No expenses for maintenance, insurance, taxes, or depreciation applicable to the building or storeroom should be included under the accounts bearing those titles, as the total of such expense is expected to be comprised in the charge for rent. In case the rental agreement provides for payment by the lessee of some of these expenses in lieu of rent, they should nevertheless be charged to the "Rent" account. In case the chain owns the building in which the store is operated, a charge will nevertheless be made for

rent and the building expenses will be separately treated. Such a situation gives rise to several new problems, which are treated in detail in Chap. X.

The bookkeeping work in connection with expenses devolves almost entirely on the head office. Even in the matter of store expenses the retail store itself has little to do with the acutal payment or recording of the transactions. Except for such petty expenses as may be paid in cash by the store manager, practically all items are handled directly by the head office. As invoices are received for the various supplies and services, they are passed

Left-hand Page

BLANK STORES COMPANY
VOUCHER REGISTER

Date	Vendor	Voucher Number	Amount Payable	Payment		General Accounts		
				Date	Check No.	Particulars	Account	Amt.
			Cr.					Dr.

Right-hand Page

BLANK STORES COMPANY
VOUCHER REGISTER

Warehouse				Retail Stores						Selling		Administration	
Merchandise		Expense		Merchandise			Expense			Expense		Expense	
Subacct.	Amt.	Subacct.	Amt.	No.	Subacct.	Amt.	No.	Subacct.	Amt.	Subacct.	Amt.	Subacct.	Amt.
	Dr.		Dr.			Dr.			Dr.		Dr.		Dr.

Fig. 32.—Another Form of Voucher Register.

The rulings indicated above constitute another possible arrangement of the voucher register (already illustrated in Figures 16 and 17). In this form the items are grouped by general classification. The retail store numbers and the various accounts under which the merchandise and expense items are classified will be indicated in the columns provided. There are no separate columns provided for segregation of details as it is expected that the items will be further analyzed and recapitulated on the form illustrated in Fig. 33.

to the proper officials for approval and then entered by the accounting department in the voucher register or purchase distribution book, just as are those merchandise invoices discussed in Chap. V.

Two possible arrangements of the voucher register to provide for distribution of store expenses have been indicated in Figs. 16 and 17. Still a third method of laying out an expense distribution record is indicated in Figs. 32 and 33. Under this plan the voucher register itself is condensed in every way possible and the detail of expenses by subclassifications is made through a

subsidiary expense record. In this expense record each store has a separate sheet for each accounting period. While this necessitates entering every item twice—once in the voucher register and again in the subsidiary distribution record—it provides a clear analysis of the items making up the expense totals, and furnishes excellent supporting data in case any question arises as to the individual amounts or invoices involved. It may be noted that the subsidiary distribution sheet can also be used for splitting up the "Merchandise" account by products or groups of articles, as indicated in the sample sheet presented.

Where the retail stores have within them several departments, it is sometimes desired to make a further subdivision of expenses

BLANK STORES COMPANY
VOUCHER DISTRIBUTION
Store No. ________ Period Ending ________

Date	Vo. No.	Merchandise			Expense									
		A	B	C	Wages	Rent	Light Power	Wrappings	Repairs	Insurance	Taxes			Miscell.

Fig. 33.—Voucher Distribution Sheet.

On this form will be entered again all the items appearing in the voucher register, each one being distributed to the merchandise or expense subaccount to which it applies. Each retail store will have a separate sheet for each accounting period. In addition to these distribution sheets for the retail stores, there will also be a corresponding sheet for the central warehouse, one for selling expenses, and one for administration expenses. The totals of the columns in Fig. 32 will presumably be posted to control accounts, while the totals of columns in this form will be posted to the supporting subsidiary ledger accounts.

according to those departments. Except in rare cases, however, this departmentalization of store operating expenses has to rest more on theoretical than actual grounds, because of the large proportion of expenses which relate to the store as a whole and cannot easily be allocated to an individual department. It may be feasible to spread such expenses over the departments concerned in preparing operating statements or reports, but it is generally not practicable to attempt to carry such subclassifications through the books of account.

Warehouse and Handling Expenses.—In the preceding paragraphs, reference has been made particularly to store operating expenses. There remain to be considered those two other groups of operating expenses mentioned at the outset—warehouse and handling expenses, and administration expenses. While the same principles of accounting apply to these groups, they differ from store expenses in that they can ordinarily be determined only for the business as a whole, and not as applying to the individual units in the chain.

As in the case of the store operating expenses, there are certain standard subclassifications of warehouse and handling expense which will ordinarily be found common to all types of enterprise. These classifications are indicated in the list below. It is understood, of course, that the list may require to be condensed or expanded to fit the requirements of each particular business.

Warehouse Expenses:

1. Wages of Warehouse Employees
2. Warehouse Rent (see note below)
3. Power and Light
4. Heat, or Refrigeration
5. Maintenance and Repair of Warehouse Fixtures and Equipment
6. Insurance on Warehouse Stock and Equipment
7. Taxes, Licenses, etc.
8. Depreciation of Warehouse Equipment
9. Merchandise Shrinkage, Deterioration, etc.

Handling and Delivery Expenses:

10. Wages of Truck Drivers and Helpers
11. Gasoline and Oil
12. Maintenance and Repair of Trucks
13. Insurance, Taxes, Licenses, etc.
14. Depreciation of Trucks.

It is understood that in each of these groups at least one additional account will be required for other expenses not classified. These "Miscellaneous" accounts, however, should be used as rarely as possible and separate classifications should be provided to record any type of item which recurs frequently and involves any considerable amount of money. If the warehouse is owned and not rented, there will be substituted for account No. 2 above the necessary subaccounts to cover the building

expenses—"Maintenance and Repairs," "Insurance," "Taxes," "Depreciation," and possibly others.

Where the concern has no central warehouse, the element of storage expense disappears and that of handling alone remains to be dealt with in the accounts. In some instances this expense is of such a minor nature that it may be treated simply as one of the store operating expenses and allocated directly to the units of the chain. In most cases, however, including all those where a central warehouse is involved, it is necessary to accumulate all the expenses of this group separately and distribute only the totals to the store units.

Some attention has been given previously to this question of apportioning storage and delivery costs to the retail establishments. The ideal method would probably be that which would allocate to the cost of each article of goods handled its proper portion of the total warehouse and handling expense. In practice, unfortunately, it is impossible to make any such distribution of the charges, because the actual amount of those handling expenses is unknown at the time the goods are delivered to the stores, and also because the units of most commodities differ from each other in size, weight, and other characteristics to such an extent that a scientific distribution of expense is impossible.

The simplest method of apportioning the type of expense referred to is doubtless to accumulate the total of such expense for a given period and then spread the amount over the operations of all the retail stores on the basis of the value of the goods handled by them. This, to be sure, makes no provision for adding anything to the inventory value of the stock in trade to cover the addition to original invoice cost which results from the process of storage and rehandling. On the other hand, if an arbitrary percentage of some sort is added to cost in billing the goods from the warehouse to the stores, there is created a margin which may vary considerably in total from the combined expenses which it is supposed to absorb. The undistributed balances which arise when such methods are followed introduce a new problem in accounting, which is further discussed in Chap. X.

Administration Expenses.—The third group of operating expenses, broadly termed "administration expenses," will necessarily include all those items applying to operation of the chain as a whole and not to the individual stores or actual handling of

merchandise. The possibilities of classification in this group are too numerous for detailed mention here. In the list given below are noted those general subdivisions into which such expenses are most frequently divided, although there is no pretention that the list is by any means complete or suitable for all types of enterprise.

1. Salaries of Executives
2. Salaries of Office and Clerical Employees
3. Office Rent
4. Stationery and Printing
5. Telephone, Telegraph, and Postage
6. Other Office Supplies and Expenses
7. Advertising
8. Traveling Expenses
9. Professional Services
10. General Corporate Taxes.

The task of what is termed "administration" in a chain enterprise embraces several functions—purchasing, advertising, store supervision, accounting, etc. An effort is sometimes made to subdivide further the expense classifications given above so that there may be determined the amount of each expense applicable to each administrative function. Except in a very large chain enterprise, such an attempt is generally more trouble than it is worth Throughout the process of classifying expenses, it must be borne in mind that too much subdivision may as easily obscure the facts in the case as too little. If general expenses are to be apportioned between administrative departments, they may well be considered first in total, with the subsequent distribution understood to be supporting data rather than the primary source of information.

Another question of apportionment arises in connection with these general administration expenses. It is the aim in a great many enterprises to reduce everything to terms of the individual store unit. In theory at least, each store must bear its portion of the general expenses of the business as well as its own direct expenses. Where this theory is adopted, it becomes necessary to apportion the total administration expenses to the individual stores on some fair basis. What is a fair basis may easily be a question without an answer.

If an attempt at apportionment is made, it should be with regard for the same caution which has just been given in connection with departmentalizing administration expenses. In point of fact, the expenses of administration are expenses of the chain as a whole, and no elaborate theory of apportionment will alter this fact. It may be desirable for statistical purposes to show an item of administration expense as a necessary deduction in finding the net profit from operations of each unit in the chain, but the element of administration expense as a concrete and separate item should not be lost sight of through any procedure of this sort.

As a bookkeeping proposition, there can be little argument against providing a separate group of ledger accounts for the various administration expense classifications. Columns will be ruled for them in the voucher register or expense distribution book, and if any apportionment between stores is decided upon, it can be handled in the periodic reports and not in the ledger accounts. The preparation of these reports and various items of statistical information is considered in later chapters of this book.

Distributing Expenses by Periods.—The various operating accounts into which expenses are carried must necessarily be considered in terms of totals by accounting periods. If each expenditure made related solely to the accounting period within which the invoice was received and vouchered (or entered in the purchase distribution journal), there would be no further complications in the treatment of these expenses. Gross profits realized during a given period would be expected to carry the weight of all expenses incurred during that period, the residue after such charges being considered the net profit of the period.

When it is remembered, however, that reports of operating results are usually required at least once a month, and in some cases even more frequently, while expenses such as insurance and taxes are ordinarily paid for a year or more at a time, it becomes apparent that there is an additional problem connected with allocation of expenses by periods as well as by the classifications previously mentioned.

Several methods of accomplishing such distribution by periods may be utilized. The first of these may be employed where an expense is paid in advance and the proper allocation of the burden can be determined at the time the invoice is vouchered. Charac-

teristic of such expenses is the ordinary insurance premium, which is paid in advance, usually for a year or longer. If the calendar month has been adopted as the basic accounting period of the business, one-twelfth of the premium paid may immediately be allocated to each of the succeeding 12 months and the proper bookkeeping entries will be made to charge the operating expense accounts with the proper amount each month.

Since there may be a number of insurance policies in force, an insurance register or monthly distribution book may be required to facilitate spreading the charges over the proper periods. This is simply a columnar form in which is entered the total amount of the premium and the amount applicable to each accounting period during which the policy is in force. An example of such a form is given in Fig. 34; it may be used for the distribution of any expense of a similar character.

A second type of expense which may require distribution by periods is the cost of the various operating supplies. If these are

BLANK STORES COMPANY
INSURANCE REGISTER
Year ________

Pol. Dates		Name of Insurance Company	Policy No.	Kind of Insurance	Amount of Policy	Rate per $100	Total Premium	Distribution of Premium Expense												
Eff	Exp							Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Next Year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(13)	(19)	(20)	(21)
Totals																				

FIG. 34.—Insurance Register.

This form may be used for keeping a record of the insurance policies in force and also for distributing the premium expense by periods. The total premium for each policy is entered in column 8 and the proper portion of the premium is entered in the column for each month covered by the policy. The total of each of these month columns will then represent the amount of premium expired during the month. At the end of the year a new sheet is prepared and any remaining premium is similarly distributed over the months of the new year.

purchased in advance in considerable quantities and issued to individual stores piecemeal, it may be necessary to keep a collateral record of some sort to show the actual consumption of such supplies by periods. This is particularly true if a general stock of the supplies is carried in the central warehouse. They should be distinguished carefully from goods making up the stock in trade and requisitioned by the stores on a different form of order from that used for salable merchandise. Wrapping paper and fontainers, small tools, repair materials, and kindred items may call into this group.

If these are to be charged properly to the period in which they are utilized, it will be necessary for the head office to maintain a record of the amounts delivered to each store, to price these at cost, and distribute the charge by a journal entry at the end of each accounting period. The form of store order to be used will readily suggest itself. When these have been priced in the head office, they may be recapitulated on a columnar form such as is shown in Fig. 35. The column totals from this form will be used as the basis for the necessary journal entries.

It should be noted that the relative amount of such supplies used is ordinarily small; consequently, where the amounts are delivered direct to the retail stores as purchased, there will prob-

BLANK STORES COMPANY
RECAPITULATION OF OPERATING SUPPLIES CONSUMED
(Deliveries from Warehouse to Retail Stores)
Period Ending ________________

Date	Store Order No.	Amount of Order	Store No. 1		Store No. 2		Store No. 3		Store No. 4		Store No. 5		Store No. 6		Store No. 7	
			Wrap'gs	Maint.	Wrap'gs	Maint.	Wrap'gs	Maint.	Wrap'gs	Maint.	Wrap'gs	Maint.	Wrap'gs	Maint.	Wrap'gs	Maint.
		Cr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.
Totals																

FIG. 35.—Recapitulation of Operating Supplies Consumed.

This form may be used to show the distribution of operating supplies delivered from the central warehouse to the retail stores. These supplies will be ordered by the stores on some form similar to that shown in Fig. 26, but ruled specially for handling operating supplies instead of merchandise. The total of those orders will be carried into this recapitulation, becoming a credit to the central stock of operating supplies and a charge to the store expense accounts. In this illustration it is assumed that all the supplies used fall either under the heading of "Wrappings" or "Maintenance"; if other accounts were affected, additional columns for each store would be required. It is also assumed that the amounts delivered to the stores are used up promptly, each lot being chargeable to the expense of the month in which received.

ably be no considerable error involved if the expense is written up immediately as a charge against the period when the goods are received. Purchases of this character are usually being made right along from time to time and the expenditures from one month to another tend to equalize the periodic charge. Again, the same method of distribution as recommended for insurance premiums may be adopted on the arbitrary assumption that an equal quantity of the supplies will be consumed in each of a predetermined number of future periods. Usually little excuse can be found for insistence on highly technical treatment of these items, the aggregate amount of which ordinarily justifies only

short-cut methods resulting in any reasonable apportionment of the expense.

The third group of charges which require distribution by periods includes those items which accrue invisibly from day to day and must be met in a lump sum at or after the end of a considerable period of time. Characteristic of these are local taxes of the ordinary kind. Here the amount of the expense eventually to be met must be estimated in advance and the accruing obligation must be recognized by a charge in each accounting period. If the number of such expenses were sufficient, the columnar distribution form, like that shown in Fig. 34, might be required to record them. Usually, however, they are few in number and some informal memorandum suffices to keep track of their nature and amount.

Equipment bought for the store—fixtures, delivery, wagons, etc. —becomes eventually an expense of the business, just as surely as the more perishable goods and services to which reference has just been made. It might be possible to consider such items as prepaid expenses of the same character as insurance premiums. In view, however, of their generally longer life and the indeterminable length of their service to the concern, they are usually treated on an entirely different basis. Briefly, the ordinary practice is to set these items up as fixed or semi-permanent assets of the concern at the time they are purchased, and then to write off or depreciate them on such a basis that their value will have been eliminated from the assets of the business by the time the property itself has reached a point where it is no longer of service.

The theories of depreciation are too many and varied to find place for discussion in this book. The total fixed property of an individual chain store is usually a relatively small amount. It will doubtless serve all practical purposes if its cost is allocated in advance to a given number of accounting periods—covering the estimated life of the particular item of property—and a proportionate amount of the cost is charged off as an expense of operation in each period. A columnar form of the same character as that shown in Fig. 34 may again be used for this purpose. Each new item of equipment purchased will be entered on the form and distributed over the appropriate number of periods and the total column for each period will be the basis for the depreciation expense charge against the store in question.

It is obvious that this distribution of expenses by periods will involve altogether different bookkeeping procedure from that which would result if the periodic expense accounts were charged directly from the voucher register or expense distribution books. It should not be inferred, however, that all or even the majority of expenses incurred require to be treated as just indicated. The important item of wages is ordinarily paid for short periods at a time and may be charged directly to operations without any intermediate steps. Many other items can be similarly treated and there is every advantage in so treating them, unless a more elaborate procedure is absolutely required to insure even reasonable accuracy.

If items like insurance, taxes, and those supplies which are carried in stock and disbursed from the central warehouse must be distributed by periods before they can be properly charged to expense accounts, it will be necessary to handle them through the voucher register or expense distribution book in a slightly different manner from the ordinary types of expense, but the variation in the ruling of these records will be slight. Further discussion of this point is included with the comments on bookkeeping entries which appear below.

Bookkeeping Entries.—The bookkeeping entries in connection with operating expenses will be subject to variation, just as are those recording merchandise purchases. The first of the two possible methods, and probably the more familiar to most bookkeepers, is the posting of all expenditure items to an expense or profit and loss account, with an adjustment of prepaid and accrued expenses made by means of a sort of periodic inventory taken at the end of each accounting period. Where this plan is followed, the monthly entry by means of which the facts summarized in the voucher record or expense distribution book are expressed will be as follows, the merchandise items being omitted:

Dr. Store Operating Expenses—Store No. 1 (in detail)........	$xxxx	
Store Operating Expenses—Store No. 2 (in detail)........	xxxx	
Store Operating Expenses—Store No. 3 (in detail)........	xxxx	
etc.		
Warehouse Expenses (in detail)........................	xxxx	
Handling Expenses (in detail).........................	xxxx	
Administration Expenses (in detail)....................	xxxx	
Cr. Vouchers Payable (or Accounts Payable)........		$xxxx

If at the end of an accounting period it is determined that certain of the expenses paid apply to future periods rather than the current one, the amount of the expense prepaid will be calculated, or "inventoried," and an entry set up in the following form:

Dr. Prepaid Insurance	$xxxx	
Prepaid Rent	xxxx	
Operating Supplies on Hand	xxxx	
etc.		
Cr. Store Operating Expenses—Store No. 1 (in detail)		$xxxx
Store Operating Expenses—Store No. 2 (in detail)		xxxx
etc.		

By means of this entry the individual operating expense accounts are relieved of the charge for such expenses as apply to future periods, and the remaining balance can properly be considered a charge against current profits.

On the other hand, where expenses are known to have accrued during the period but have not been paid prior to its close, an entry of the opposite character must be made:

Dr. Store Operating Expenses—Store No. 1 (in detail)	$xxxx	
Store Operating Expenses—Store No. 2 (in detail)	xxxx	
Store Operating Expenses—Store No. 3 (in detail)	xxxx	
etc.		
Cr. Accrued Taxes		$xxxx
etc.		

Through such an entry the current expense accounts are charged with their proper portion of unpaid expenses and the amount is set up as an accrued liability on the books.

It is obvious that the above method of adjusting expense accounts at the end of a period introduces into the books certain accounts of a temporary character, set up for the purpose of recognizing the situation at a given point of time but requiring revision immediately when that point of time has passed. Just as in the case of merchandise inventories set up in the same fashion (see Chap. VI), it is necessary to reverse these periodic adjusting entries at the outset of the next following accounting period. The amounts temporarily set up as prepaid expenses are thrown back into the same operating expense accounts from which the charges were drawn at the close of the preceding period, only to be adjusted again when the next period

has run its course and a new calculation is made of the amounts prepaid as at that later date. Similarly, the accrued expenses are reversed at the beginning and calculated anew at the end of the next period. The form of these reversing entries will be clear without an illustration.

This method of treatment is clumsy and complicated when books are to be closed at the end of each monthly period. Where closing entries are actually made on the ledger only once a year, such procedure may save considerable time, but it is not adaptable to the shorter accounting periods. An alternative method for handling those expenses which require distribution between periods is given below.

The entry from the voucher register setting up such expenses as are charged directly into the current operating accounts as paid will be the same as the first entry given above. For such expenses, however, as are paid for a year or more at one time, and thus must be spread over a number of monthly accounting periods, separate columns may be ruled in the voucher register or purchase distribution book (unless the items are so few in number that they can easily be carried through a "Miscellaneous" or "Sundries" column and posted individually). The portion of the entry relating to such expenses in the case of the voucher register will be as follows:

Dr. Prepaid Insurance	$xxxx	
Prepaid Rent	xxxx	
Operating Supplies	xxxx	
Accrued Taxes	xxxx	
etc.		
Cr. Vouchers Payable		$xxxx

If a purchase distribution book is used with an accounts payable ledger, these items may or may not be set up through that record. It is possible to charge them direct from the cash disbursements book, which is referred to in Chap. XI, but the effect, as far as the debit side of the entry is concerned, will be unchanged.

At the end of each accounting period there will be calculated the amount of expense of each type applicable to the current period. Methods of determining this amount have been referred to in the earlier pages of this chapter. An entry for such expense will then be made in the following form:

Dr Store Operating Expenses—Store No. 1 (in detail)........	$xxxx	
Store Operating Expenses—Store No. 2 (in detail)........	xxxx	
Store Operating Expenses—Store No. 3 (in detail)........	xxxx	
etc.		
Warehouse Expense (in detail)........................	xxxx	
Cr. Prepaid Insurance............................		$xxxx
Prepaid Rent................................		xxxx
Operating Supplies............................		xxxx
Accrued Taxes...............................		xxxx
etc.		

The effect of this method is to treat the prepaid and accrued expense accounts as perpetual inventory accounts, the balance of which at the end of every period will represent the amount of prepaid or accrued expense. For example, if the total insurance premiums paid in advance have been charged to the "Prepaid Insurance" account from the voucher register, and the amount of premium applying to the period is credited to this account by an entry in the form last illustrated above, the balance of the account will be the amount of premium still unexpired. The correctness of this balance can be proved by calculating the total unexpired premiums. On the other hand, the amount credited to "Accrued Taxes" will create a gradually increasing credit balance in that account corresponding to the estimated taxes accruing during the periods under consideration. Eventually this balance will be wiped out by a charge for the total taxes paid at the end of the year.

No consideration has been given here to the question of depreciation. With the amount determined, it is necessary only to prepare an entry in the following form at the end of each period:

Dr. Store Operating Expenses—Store No. 1 (Depreciation)....	$xxxx	
Store Operating Expenses—Store No. 2 (Depreciation)....	xxxx	
Store Operating Expenses—Store No. 3 (Depreciation)....	xxxx	
etc.		
Warehouse Expense (Depreciation).....................	xxxx	
Administration Expense (Depreciation)..................	xxxx	
Cr. Reserves for Depreciation (in detail)............		$xxxx

It will be understood that the accounts charged by the above entry will be the depreciation subaccounts in each general group and the accounts credited will be the depreciation reserves corresponding with each group of fixed assets. The treatment of fixed asset accounts and depreciation reserves is given further consideration in a later chapter.

CHAPTER X

MANUFACTURING AND OTHER SIDE LINES

The preceding chapters have been devoted to the nature and treatment of the three principal elements of the chain store's business history. These are the factors in the operations of the retail merchandising enterprise which must be known in order to determine the net result of its operations from the standpoint of financial profit or loss. In the final analysis this business history may be reduced to a setting off against the income or revenue from sales of the combined cost of goods sold and expenses of operation.

To bring out this aspect of the situation, it is customary to set up in the books an account in which are summarized the profit and loss elements of the business. Described in bookkeeping terms, sales revenue becomes a credit to this account, while the other items mentioned become partially offsetting charges. On the page of a ledger, therefore, these items will eventually be found in something approaching the following position or relationship (the figures shown are inserted merely to illustrate the form):

General Profit and Loss Account

Cost of Goods Sold......	$ 750.00	Sales Revenue.........	$1,000.00
Operating Expenses—			
Store................	100.00		
Warehouse...........	50.00		
Handling.............	30.00		
Administration.......	20.00		
Total Cost and Expenses.	$ 950.00		
Balance—Operating Profit	50.00		
	$1,000.00		$1,000.00

When the above items for a given period have been accurately determined and set up in account form, the balance (that is, the excess of the total sales revenue over the total costs and expenses) will represent the profit from trading operations for that period.

Should the total charges (that is, the total of cost plus expenses) exceed the total sales revenue, the balance would be on the other side of the account and would represent a trading loss.

If there were no more complications in the operation of the business than have been considered in the discussions occupying the preceding chapters, there would be nothing to prevent immediate arrival at the profit and loss figures in this manner as soon as sales, cost of goods sold, and the various operating expenses have been determined. In this preceding discussion, however, there has been assumed a set of simple operating conditions, which are likely to be met with but rarely outside of the smallest chain organizations. It seems inevitable that, as the enterprise grows in size, it develops not only in the direction of adding more units and doing a larger volume of business, but also in entering into various collateral and subsidiary lines of activity. These new activities introduce new complications into the accounting system.

Accounting Problems Involved.—With the varied types of product and kinds of business making up the chain store field, it will be impossible to consider in detail all the possible activities which may be embraced in the operations of such enterprises. A few of the more common non-merchandising activities can be suggested, however, and the principles which govern their treatment will, in general, be found applicable to any other features of operation the character of which is at all similar.

The general problem presented in connection with these subsidiary or collateral activities is the following. The business enters into some field of endeavor other than retail merchandising, with the idea of furthering indirectly its retail merchandising activities. In this field purchases are made and expenses incurred of a different character from those considered as a part of the merchandising phase of the business. As a result of these expenditures there is contributed to the chain enterprise a product or service which enters into future calculations in terms of its value as a whole, without particular reference to the individual items connected with its creation. It will be necessary, therefore, to accumulate separately the aggregate cost of this product or service and charge it into the general merchandising operations of the business as a single item, in order that the history of the trading operations may not be confused and complicated with the details of non-trading activities.

To take a concrete example, the enterprise may as a subsidiary activity manufacture one or more of the products sold in its stores. From a trading standpoint the management is interested in the cost of these articles as single items; they must stand on the same footing as the goods bought complete from outside sources. The details of the cost to manufacture the articles must be accumulated separately and converted into terms of finished cost per article. The item will then be dealt with in total rather than as so much aggregate manufacturing labor, supplies, maintenance, etc. The same sort of treatment may be required for special items of service to the concern, and various other subsidiary activities in addition to manufacturing.

Handling the cost of an article manufactured or a service performed under such circumstances is not always a simple matter. For example, it may be necessary to use the cost of the product or service in other portions of the accounting procedure before the actual figure is known or determinable. Again, the actual cost itself may not be the most useful criterion by which to judge the value of the product or service to the enterprise; in order to accomplish uniformity in the accounts for purposes of analysis, it may be desirable to put some value on the articles which will bring them into their proper relationship with similar goods or services bought in the open market. As soon as either of these situations arise, there enters into the accounting the same element of unallocated margin between cost and assumed value which has been encountered in the discussion once or twice before.

The regulation and diposal of these subsidiary margins may readily become the source of endless confusion and misunderstanding unless the subject is thoroughly comprehended and intelligently dealt with from the outset. To illustrate the difficulty and how it may be dealt with, there are discussed in this chapter the more common forms of non-trading activity which occur in chain store enterprises. First of these is the storage and handling function performed by the central warehouse and delivery trucks, which has had somewhat extended consideration in Chap. VII. Second is the process of manufacturing from raw materials some or all goods handled in the retail stores. Third is the ownership and operation of buildings in which the retail stores are located. These three activities may be taken as typical if not inclusive of all activities of the sort described.

It will be seen on consideration that there are three possible methods of dealing with the elements which make up the history of such a phase of business activity. The first possible method involves treatment of the expenses incident to the conduct of that portion of the enterprise simply as one group of the operating expenses of the enterprise as a whole. This plan might be adopted where the activity in question bears a reasonably direct relationship to merchandising activity, as in the case of storage and handling expenses. The method has, however, the very obvious objection of failing to allocate to the retail store units what may prove to be a very considerable portion of the expenses as a whole, thus obscuring the actual operating results of the store units, in which the management is primarily interested.

The second possible method involves a cumulation of the expenses connected with the activity and an apportionment of the total to the stores (or goods in stock) on some satisfactory basis. This plan has the advantage of leaving no undistributed margins to be accounted for, but is open to the objection that there is no allocation of cost to the units in which store performance and merchandise transactions are measured, so that this feature of the costs is impossible of inclusion where a detailed analysis of merchandise transactions is maintained.

The third possible system provides for setting in advance a value of some sort on each unit of product or service contributed to the enterprise by the subsidiary department under consideration. This value may be estimated on such a basis that the aggregate value of the services or products delivered may as nearly as possible cover the costs or expenses of the department during that period. Again, the value may be estimated on some entirely different basis—such as the current purchase price of the same article in the open market. In either case the total value assigned to the goods will not exactly equal the total cost and there will be left for disposal a margin representing cost over- or under-absorbed. This may be deemed, if one likes to theorize, the profit or loss realized from operation of the subsidiary department. There are some thoroughly valid objections to this method also, as will be noted in succeeding sections of this chapter.

Storage and Handling Operations.—Taking up first the question of storage and handling expense, the accountant is con-

fronted with a choice between handling the expense of these departments as operating expenses of the business as a whole, or endeavoring to add this expense in some manner to the cost of the merchandise handled by the warehouse and the delivery system. The procedure where the first alternative was adopted has already been discussed in detail. If the second course is followed, the total warehouse and handling expense must be distributed as a charge to the "Merchandise" accounts of the various retail stores, or else each article of merchandise shipped from the central warehouse to one of the stores must be billed at a price which will cover not only its original cost but also the estimated unit cost of handling and delivery.

Under the periodic physical inventory method of calculating cost of goods sold, there is no detailed analysis of goods passing through the retail stores. Evidently, therefore, if some basis can be agreed upon for distributing as between stores the total warehouse and handling expense, there will be nothing to prevent this item from being added in total to the cost charged against the store "Merchandise" accounts. When a periodic physical inventory is taken—on whatever basis—the balance of the store merchandise account will in any case be considered a profit and loss item representing cost of goods sold, and it will not affect the final net result indicated if the storage and handling expense is carried over as a part of the cost of the goods instead of being charged to "Profit and Loss" as an operating expense. In valuing the stock remaining on hand for inventory purposes, it would be legitimate under such circumstances to add to the invoice cost of each item a reasonable amount to cover this warehouse and handling expense.

If, however, some form of detailed analysis is being maintained in connection with all or part of the merchandise to which the storage expense is to be added, the unit cost in terms of which an article is valued must be increased by a definite amount to cover the storage expense item. This additional fraction must be considered both when the article is placed in stock and charged to the "Merchandise" account, and when it is sold from stock and credited to the "Merchandise" account as transferred to cost of goods sold. Here arises somewhat the same situation as that considered in Chap. VIII in connection with perpetual inventories at retail prices. Goods are taken out of the warehouse stock at cost prices but charged to the retail store "Merchandise"

accounts at something exceeding cost—leaving a margin between the two for disposition in some manner.

The solution of this problem involves the creation of a new type of account which, for lack of a better title, may be termed "Storage and Handling Profit and Loss." When the goods shipped from the warehouse are credited to warehouse stock at original invoice cost and charged to the retail store "Merchandise" accounts at the new price, on whatever basis predetermined, the difference or margin will be credited to this just-mentioned account. When all the expenses incident to storage and handling for the period have been accurately determined, the total of every subclassification will be transferred to this same account, which will then appear in substantially the following form (the figures shown are inserted merely to illustrate the form):

Storage and Handling Profit and Loss Account

Warehouse Expenses (detail)	$ 500.00	Margin between Invoice-cost Price and Delivered-to-store Price of Merchandise (total)	$1,000.00
Handling Expenses (detail)	400.00		
Total Expense	$ 900.00		
Balance—Profit Taken on Warehouse and Handling Operations	100.00		
	$1,000.00		$1,000.00

The balance of this account will represent the amount of warehouse and handling expenses under- or overabsorbed during the period—the possibly so-called "Storage and Handling Profit and Loss," referred to above as "Profit Taken on Warehouse and Handling Operations."

The advantages and disadvantages of treating warehouse and handling expenses in this fashion have been set forth in the discussion in the preceding chapter. Where an estimated amount to cover the cost of storage and delivery is added to the unit price of the goods, it probably results in a fairer value for those goods. On the other hand, if the amount added to the cost in carrying out the procedure above mentioned is materially in

excess of the actual storage and delivery expense, the cost of the goods may be inflated. In such case the actual facts of operations will be obscured by the accumulation of a profit in the "Warehouse" accounts which is actually a merchandising profit and should so be shown.

In almost all ordinary cases it is probably more satisfactory to adopt one of the first two methods presented—that is, to treat the warehouse and handling expenses as operating expenses of the chain as a whole, or to distribute them in total to the "Merchandise" accounts of the various retail stores. The apportionment by stores may be made on the basis of the cost value of the goods delivered to the stores, or on some other equitable basis.

Manufacturing Operations—Distribution of Costs.—The considerations which made such treatment preferable in the case of warehouse and handling expenses may not, however, apply to other activities. Where a manufacturing process occurs as one feature of the operations of the business, the whole treatment of merchandise throughout the enterprise may be seriously interfered with unless some definite unit value can be placed on each article manufactured as soon as it is completed and put into stock. It will be wholly misleading to charge the cost of raw materials purchased into a merchandise account and treat manufacturing expenses as a cost of operating the retail stores. Moreover, except in rare cases it will be difficult, if not impossible, to distribute the manufacturing costs by simply apportioning them in total to different retail merchandise accounts. The concern is practically compelled to treat its manufacturing operations as an independent enterprise, operating independently and sustaining its own profits or losses.

When manufacturing is referred to, it should be emphasized that the type of manufacturing under consideration is a separate and independent process by which a salable article or commodity is produced from raw materials and distributed in finished form to the retail stores. This must be distinguished from those activities within a retail establishment whereby goods are mixed or processed before being sold. The soda clerk who mixes fountain drinks, the restaurant which bakes its own pies, etc., each is in a sense "manufacturing," but only as a feature of the merchandising operation. No separate or independent manufacturing department is involved.

It may well be noted at this point, however, that in establishments of the kind just mentioned, there may be required a separate grouping of the store expenses connected with the mixing or processing function, as distinguished from those having to do solely with merchandising. In some cases this "manufacturing" element may become so important that all the so-called store expenses may have that character rather than that ordinarily associated with selling or trading. This is the case in enterprises where a service rather than a commodity is sold—shoe repair shops, barber shops, etc. The element of tangible merchandise sold may become so small as practically to disappear, leaving only the expenses of operation to be set over against sales revenues.

Where a concern, however, is engaged in a manufacturing operation distinct from the conduct of its retail establishments, there are two processes involved. For purposes of this discussion it may be assumed that the manufacturing process is subsidiary to the retailing or merchandising process; if this were not the case, the enterprise would pass out of the chain store field, as that field has been previously defined. In some cases the chain may, in fact, manufacture all of the goods sold by it, but usually only a portion of the goods sold are so manufactured, the bulk of the items being bought from outside vendors in the usual way.

It is conceivable that the practice of accumulating all the manufacturing costs and expenses into a single total and apportioning that total by stores could be employed in a comparatively simple enterprise where all the goods handled passed first through the manufacturing stage. A chain of candy stores, for example, selling only candy of their own manufacture, might adopt some basis of distributing the net manufacturing cost to the various stores and subsequently calculate the cost of goods sold through a physical inventory of the merchandise in stock at the end of a period. Even here, however, the necessity of finding a value for the merchandise in the inventory would involve some sort of calculation of unit cost of the product manufactured. Once such a calculation is undertaken, most of the essentials are provided for a more satisfactory treatment of the manufacturing process as an independent and separate enterprise.

If, however, it was decided to distribute the total manufacturing cost in the manner suggested, it would first be necessary to add together the cost of all raw materials used and

of expenses incident to manufacture. In determining the amount of these costs and expenses it would, of course, be necessary to take into account inventories, prepaid expenses, and accrued expenses at the beginning and end of each period, as was indicated in Chap. IX. Some basis would then have to be used for distributing the charges to the stores—say, the quantity or number of units delivered to each store. When the "Merchandise" accounts of the stores had been so charged, they would from that point on be treated just as any other "Merchandise" account, and the only remaining problem presenting itself would be that of fixing a proper inventory value for the goods in stock at the end of any period.

Normally, however, such procedure is too clumsy to find a place in an orderly accounting system and too inaccurate to provide anything like a satisfactory analysis of results. It becomes necessary for the concern to treat its manufacturing operations as though conducted for producing goods to be sold to outsiders and to treat the merchandise secured from its own factory just like that bought from outsiders. A definite line is drawn between manufacturing operations and retailing operations and each process is made to stand as nearly as possible on its own feet.

Manufacturing Department Accounts.—The elements of manufacturing accounting are dealt with at length in numerous books on the subject and can be only briefly touched upon here. The "Manufacturing Profit and Loss" account is made up, like that for the retail store, of certain charges for goods consumed and expenses incurred, with credits for the revenues received from sales. An effort is ordinarily made to isolate the factors relating to the manufacture of each particular article, in order that the finished cost of that article may be determined; this is necessary for valuing inventories and determining the cost of goods sold. By maintenance of the proper records, the cost of raw materials used and expenses incurred in making up each article or group of articles can be separately determined and the unit cost of the article in completed form can be learned.

In any event the total costs and expenses of a period can be found and will constitute the charge or debit side of the "Manufacturing Profit and Loss" account. On the credit side will appear the sales revenue. In the chain enterprise there will ordinarily be no actual sale, and the revenue for which the manufacturing department may take credit may be only the value of the goods

delivered to the warehouse or retail stores, as computed on whatever basis for the transfer is adopted.

Where uniformity of results from a retail store standpoint is the prime consideration, the value put on a given article will ordinarily be its current purchase price in the open market. Each store will accordingly be charged for goods obtained from the concern's own factory at the price paid for similar goods obtained on the outside. Theoretically at least, such a price will be a fair credit to the factory also, on the assumption that its output could be sold on the outside at those prices. Often, as a matter of fact, some of the product may be thus sold, and the manufacturing department may be receiving revenue from genuine sales to outsiders as well as the intracompany credit for goods transferred to the warehouse or the retail stores.

When the manufacturing costs and the revenue credits for a given period have been accurately determined and gathered together in their proper subaccounts, they will be transferred and summarized in what may be designated as the "Manufacturing Profit and Loss" account, in which the items will appear somewhat as follows (the figures shown are inserted merely to illustrate the form):

Manufacturing Profit and Loss Account

Raw Materials Used......	$ 400.00	Revenue Credits (for goods delivered to central warehouse or retail stores)................	$ 800.00
Manufacturing Expenses (detail)...............	500.00	Sales to Outsiders.......	200.00
Total....................	$ 900.00		
Balance—Manufacturing Profit.................	100.00		
	$1,000.00		$1,000.00

The balance of this account (that is, the amount by which the total sales and credits exceeds the total of cost and expenses) represents the profit of the manufacturing department. If the balance or excess amount should be on the other side of the account, it would, of course, represent a loss.

Various objections may be made to any treatment which provides for recognizing a profit before the goods have actually left the possession of the concern—that is, been sold to outside

customers. If a large volume of goods be made up by the manufacturing department and transferred to the retail stores at a price materially in excess of cost, the accounts may show a profit before any of the goods have actually been disposed of to customers. Theoretically, such procedure constitutes anticipating a profit and is, therefore, discountenanced. If the turnover of all goods is rapid, however, and there is no question as to the salability of the articles at a price which will cover the value assigned to the merchandise as it passes into the retail store, there is less reason for objection on this score.

In point of fact, it will ordinarily be impossible to assign any value to the goods as they pass from the manufacturing department to the merchandise stock which will not represent at least a minor element of profit or loss. It is obviously impossible to fix any uniform set of prices which will exactly absorb all the expenses incident to a complicated process of manufacturing. Where uniformity in merchandise stock prices is the first requirement, it will be absolutely necessary to adopt the current market purchase price to avoid throwing the results from store operation all out of line.

The bookkeeping treatment and classification of manufacturing expenses will follow the same general lines as that indicated for store and other operating expenses. A separate group of manufacturing accounts will be carried in the ledger and the necessary subclassifications will be made. All wages and supplies applying directly to manufacturing will be charged to these accounts, as will also maintenance, insurance, taxes, and depreciation relating to the facilities employed in the manufacturing process—machinery, tools, and equipment, and perhaps land and buildings also. Where there is joint usage of buildings and equipment for manufacturing and other purposes, either an apportionment of the cost between departments must be made, or the manufacturing department must be charged with a fair amount as rent for space and equipment utilized.

No new type of record will be required for recording the purchase of raw materials or incurring of manufacturing expenses. The voucher register or purchase distribution book will simply be expanded to provide the necessary group of additional columns in which will be distributed the invoices properly chargeable to such accounts. The appearance of the voucher register with such columns included has not been indicated in

BLANK STORES COMPANY.

RECAPITULATION OF FACTORY DELIVERIES TO STORES

Period Ending ____________

Date	Store Order No.	Credit Factory Sales (or Mfg. Dept) P. & L.	Charge Retail Store Merchandise										
			Store No. 1	Store No. 2	Store No. 3	Store No. 4	Store No. 5	Store No. 6	Store No. 7	Store No. 8	Store No. 9	Store No. 10	Store No. 11
Totals													

FIG. 36.—Recapitulation of Factory Deliveries to Stores.

This form is similar to that shown in Fig. 27, except that it covers deliveries of merchandise from the manufacturing department instead of from the warehouse. It is a recapitulation of the orders from the retail stores which have been filled by the factory during the month, these orders being similar in form to Fig. 26. It is assumed that all goods delivered by the factory go direct to the retail stores. If any factory products were delivered to the central warehouse, an additional column would be required to charge such items correctly. If goods are sold by the factory to outside parties a separate sales journal will probably be used. In that sales journal a column will be provided for the amount of each sales invoice, the total becoming a credit to "Factory Sales" and a charge to "Outside Customers' Accounts Receivable."

any of the illustrations given, but their inclusion in the record involves no difficulty or change of procedure.

The bookkeeping forms necessary where goods are transferred from a manufacturing department to the central warehouse or a retail store will vary with the manner in which this transfer is brought about. If it is the practice for the retail stores to order goods direct from the factory, they will utilize an order form similar in general outline to that used in obtaining goods from the central warehouse. One copy of such a form will pass to the accounting department and will there be priced on the predetermined basis. These invoices in total will then be entered on a recapitulation sheet of the sort shown in Fig. 36. The column totals at the end of the period will form a basis for charges to the "Merchandise" accounts of the various stores and a credit to the "Manufacturing Department Profit and Loss" account.

If all the goods produced by the manufacturing department are delivered first to the central warehouse, there will be no orders from the stores to the factory but the factory will prepare invoices, or perhaps simply lists, of the articles produced and placed in the warehouse stock. The pricing will be done by the accounting department and an entry will finally be made to charge the "Warehouse Merchandise" account and credit the "Manufacturing Profit and Loss" account with the total value shown by the invoices for the period. Where goods are sold from the factory to outsiders also, a regular invoice system should be in effect and the operation will result in an additional entry crediting "Manufacturing Profit and Loss" and charging "Wholesale Customers' Accounts."

The similarity between manufacturing and certain other activities will be noted as the characteristics of various chain enterprises are called to mind. In any similar process some corresponding procedure may be adopted.

Building Ownership and Operation.—In connection with store operation the chain enterprise sometimes enters another field of activity essentially different from the business of buying and selling goods at retail. This is the ownership and operation of the property in which the retail stores are housed. Under ordinary conditions, space is rented for each retail store and the monthly or periodic rental appears as one of the principal items of store operating expense. In some cases, however, it becomes necessary for the concern to buy outright property which it

wishes to occupy, whereupon it is confronted with a new set of conditions of an entirely different nature.

In handling store operating expenses, it is ordinarily the constant aim of the management to put every store in the chain as nearly as possible on the same basis, so that the results shown may be comparable in all respects. In other words, if most of the stores in the chain are paying rent for their store premises, it is desirable that all stores have an item of rent as one of their operating expenses. This uniformity will be interfered with if the rental expense disappears in the accounts of one or more stores, even though the building expenses be substituted for it. The natural solution of this difficulty is to sét up the function of building ownership and operation as a separate activity whose results are to be judged independent of other features of the business. A fair rental for the store space occupied will be charged to the operations of the given retail store unit and credited as a revenue item to the building department operations.

It may be that the building has additional store space rented to other concerns, which provides an even more forceful reason for carrying the accounts on this basis. The total revenues from rentals charged both to stores of the chain and to outsiders will appear as credits to the "Building Department Profit and Loss" account, while the expenses of building operation will be set up as partially offsetting charges. The account will, therefore, take something the following form (the figures shown are inserted merely to illustrate the form):

Building Department Profit and Loss Account

Wages of Building Employees	$100.00	Rental Charged to Retail Stores of Chain	$150.00
Building Supplies, including Fuel	150.00	Rentals Charged to Outside Tenants	450.00
Repairs and Maintenance	50.00		
Insurance	75.00		
Taxes	75.00		
Depreciation	50.00		
Total Expenses	$500.00		
Balance—Building Department Profit	100.00		
	$600.00		$600.00

The balance of this account (that is, the excess of rentals charged over operating expenses incurred) will be the profit from building operations. Should the expenses exceed the rentals charged, the net result will be a loss instead of a profit.

The accounting department treatment of such transactions will follow the same lines described in connection with manufacturing operations. New columns will be introduced into the voucher register for recording building expenses. As the rental items charged will ordinarily be few in number, a columnar record for summarizing these charges will usually be unnecessary. A single journal entry in each period will ordinarily be sufficient to record all important details connected with this feature of the transactions.

Where a warehouse or factory is owned, the same procedure in handling the expenses is possible. Here, however, there is no particular reason for setting up "rent" as a distinct item of expense; since there is no uniformity to be maintained between one unit and another for purposes of recording the warehouse or manufacturing expense, it is usually just as satisfactory to include the items of building operation expense in place of a rental item, and the extra bookkeeping complications are thereby avoided. If, however, the same building is utilized partly as a warehouse, partly as a factory, and perhaps partly as a retail store as well, it will be necessary to carry the building operation accounts separately, and to charge each of the departments with a proper amount to cover rental of the space it occupies.

General Considerations in Interdepartment Accounting.—In the preceding sections have been indicated the reasons for interdepartmental charges in connection with certain separate or non-trading activities in which the chain enterprise may become engaged. Wherever such charges are made in terms of some predetermined value for each unit of product or service consumed by the merchandising departments, the effect is to set up the subsidiary department as a pseudo-independent enterprise from which will be realized a profit or a loss distinct from that realized in the operation of the retail stores. Such a result is in the nature of a necessary evil. The business of the concern being primarily the operation of retail stores, these other activities are usually entered into, not as independent profit makers, but to facilitate in some way the profitable operation of the stores. Any showing these subsidiary departments make may be a wholly fictitious one, owing to the peculiar circumstances under which they operate.

The profits of a manufacturing or other subsidiary department can readily be increased by placing a higher value on the products which it delivers to the retail stores, or decreased by placing a lower value on its products. If these semi-arbitrary values are not intelligently fixed and varied to suit varying conditions, a situation may arise in which the accounts show that the stores operated at a profit but that this was swallowed up in a manufacturing department loss, or, on the other hand, that the stores lost money but the manufacturing department made a huge profit. In the intricacies of interdepartment accounting it must not be forgotten that the fact of primary importance is the result of operations for the business as a whole, and that, so far as possible, it is desirable to interpret the aggregate result in terms of the operations of the retail stores and not in terms of subsidiary departments of the business.

Unless these subsidiary departments, therefore, are in fact independent—through the sale of products or services in large volume to outsiders as well as to the member units of the chain enterprise—it will ordinarily be most satisfactory in the long run to adjust the values placed upon those products and services for purposes of interdepartmental accounting at figures which will as nearly as possible absorb all expenses of operation, leaving no more margin unabsorbed than will inevitably result from accounting methods such as have been outlined. Profits or losses from storage, handling, manufacturing, and building operation should in the final analysis be minor items of miscellaneous income and expense without any pronounced effect on the results of the merchandising operations of the stores.

Some reference may properly be made at this point to other items of miscellaneous non-operating income and expense. These odds and ends which inevitably find their way into the affairs of every business must be dealt with in the accounts and given some recognition in the financial statements. The most prominent of such items are probably interest and discount, both earned and paid. Since the chain store business sells largely for cash and neither extends long credits nor allows discounts, it will seldom be concerned with interest earned or discount allowed. It may be vitally concerned, however, with interest paid and purchase discount earned.

The point at which these items may properly be introduced into the income account or statement of results is indicated in Chap.

XV. Their bookkeeping treatment is comparatively simple, both items frequently being handled directly from the cash disbursements book, discussion of which occurs in Chap. XI. Interest paid may be handled through the voucher register, being distributed either in a separate column provided for it or as a special item in the "Miscellaneous" or "Sundries" column.

There is in vogue in some enterprises a practice of charging interest to various departments on the basis of the amount of capital investment required for their operation. This procedure has nothing to do with interest paid on loans but is purely an interdepartment or intracompany affair. The effect may be likened to that of making charges to retail stores for rental of owned buildings; the stores and other operating departments absorb the charge, which reduces the amount shown as their profit, but the business as a whole receives credit for the interest so charged, and the final aggregate profit and loss figure is accordingly unchanged. The merits and demerits of this plan have been argued at length by numerous authorities and can receive only this passing reference here.

Most of the other items ordinarily classed as miscellaneous income and expense are minor offsets to some general class of operating revenue or expense. The amounts received from petty sales of boxes, packing materials, waste paper, scrap, and similar items should properly be considered as reducing the expense charged up in connection with the purchase of the articles concerned. If it is impractical to attempt to credit these small receipts in reduction of one of the operating expense accounts, they may be carried into a separate miscellaneous income account, from which they will eventually find their way to the general profit and loss summary.

It cannot be too often emphasized that the main business of the concern is operating retail stores and that, so far as is possible, every item of income and expense should be related to the operations of those stores. There is little point in preparing an elaborate account of what each retail store is doing if the combined net result is to be invalidated by a multitude of additional charges and credits which are theoretically "non-operating" items. Operations of the stores are the operations of the business, and unless the concern is actually engaged in some important and distinct form of business activity, the results of which must be independently judged, the attempt to split up the profits of a

business into profit from stores, profit from manufacturing, profit from warehouse, profit from building operation, and profit from a dozen other sources can only be confusing and misleading.

What the management wants is a definite and intelligible analysis of what gain or loss is sustained through the buying and selling of merchandise in a chain of retail stores. All items of income and expense should be reduced to those terms, unless there is some vitally important reasoning for their being presented independently.

BLANK STORES COMPANY

RECAPITULATION OF WAREHOUSE DELIVERIES TO STORES

Period Ending ____________

Date	Store Order No.	Credit Warehouse Merch Acct	Credit Stor'g & Handl'g Prof. & Loss	Charge Retail Store Merchandise							
				Store No. 1	Store No. 2	Store No. 3	Store No. 4	Store No. 5	Store No. 6	Store No. 7	Store No. 8
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Total											

FIG. 37.—Another Form of Recapitulation of Warehouse Deliveries to Stores.

The purpose of this form is identical with that of the form illustrated in Fig. 27. In this ruling, however, it is assumed that the goods delivered to stores are charged out at a price in excess of the original cost. The figure added to cost is intended to cover the expense of storage and handling, as indicated in the text. The amount of this margin will be entered in column 4, the original cost in column 3, and the total of the two in the store merchandise column chargeable. A similar form might be used for recording goods charged to stores at retail selling prices (see Chap. VIII). In that case the credit in column 4 would be to an account under the name "Unearned Profit" or some similar title.

Bookkeeping Entries.—Treatment in the books of account of the various subsidiary activities discussed above will depend on how far it is desired to carry the interdepartment charges as a feature of the general ledger accounting. In some cases these intracompany transfers are handled entirely by means of collateral statistical records. The expenses of each department are grouped and subclassified like any other expenses and eventually are transferred to the general profit and loss summary account without regard to their use and modification in statements and reports. In the event, however, that all the transfers are to be carried through the ledger accounts and a separate profit and loss account made up for each subsidiary department, there will be some new entries, the general outlines of which may be indicated here.

The treatment in the voucher register of warehouse and handling expenses incurred has been indicated in the closing paragraphs of Chap. IX. There will be no change in the entries affecting these expense accounts, regardless of what plan is utilized for distributing the expense to the retail stores. If the total of these expenses is to be charged to the "Merchandise" accounts of the stores at the end of each period, an entry will be prepared at that time in the following form:

Dr. Merchandise—Store No. 1	$xxxx	
Merchandise—Store No. 2	xxxx	
Merchandise—Store No. 3	xxxx	
etc.		
Cr. Warehouse Expenses (in detail)		$xxxx
Handling Expenses (in detail)		xxxx

After such an entry has been made, no balance will remain in any of the "Warehouse" and "Handling" expense accounts for transfer to the profit and loss summary, the charge for this expense being carried into the summary account as a part of the cost of goods sold.

If a predetermined amount is to be added to the cost of goods transferred from warehouse to store, to cover the warehouse and handling expense, the transfer entry will appear in the following form:

Dr. Merchandise—Store No. 1	$xxxx	
Merchandise—Store No. 2	xxxx	
Merchandise—Store No. 3	xxxx	
etc.		
Cr. Merchandise—Central Warehouse		$xxxx
Storage and Handling Profit and Loss		xxxx

Such an entry as this would be made for every store order filled by the warehouse and billed by the accounting department, except that, as indicated in Chap. VII, these store orders are usually recapitulated and summarized before entry is made in the general ledger. Where the amount charged to the stores is the same as the amount credited to the "Warehouse Merchandise" account, this recapitulation is simply a columnar record by stores. Where a margin is added to cover the warehouse and handling expense, an additional column must be introduced into the recapitulation for recording this element, which will be the difference between the price charged to the store and the amount credited to

the "Warehouse Merchandise" account. The total of this margin column will be the amount credited to the so-called "Storage and Handling Profit and Loss" account. The form of columnar recapitulation to be used under such circumstances is illustrated in Fig. 37.

Under this plan the various handling expense accounts will be closed into this same profit and loss account instead of being carried directly into the general trading profit and loss summary. This transfer entry—more properly termed a "periodic closing entry"—will be in the following form:

Dr. Storage and Handling Profit and Loss....................	$xxxx	
Cr. Warehouse Expenses (in detail)..................		$xxxx
Handling Expenses (in detail)..................		xxxx

In the final closing, the balance of this profit and loss account will be transferred to the general profit and loss summary.

The entries necessary to record the details of manufacturing operations may be as numerous and complicated as those connected with operation of the retail stores. Originally, there will be a separate group of expense accounts receiving charges from the voucher register or purchase distribution book, and also certain raw material accounts which correspond in a general way to "Merchandise" accounts of the stores. These material accounts require to be adjusted for periodic or perpetual inventories, leaving a balance to be charged off as raw materials consumed. The expense accounts also may require adjustment for prepayments and accruals. When the amount applicable to the current period has been determined, there will be a closing or transfer entry in the following form:

Dr. Manufacturing Profit and Loss.........................	$xxxx	
Cr. Cost of Raw Materials Consumed...............		$xxxx
Manufacturing Expenses (in detail).............		xxxx

The entry recording the transfer of merchandise to the warehouse and retail stores will be made up from the totals of the columnar record shown in Fig. 36 and will be in the following form:

Dr. Merchandise—Central Warehouse......................	$xxxx	
Merchandise—Store No. 1.............................	xxxx	
Merchandise—Store No. 2.............................	xxxx	
Merchandise—Store No. 3.............................	xxxx	
etc.		
Cr. Manufacturing Profit and Loss.................		$xxxx

If any of the goods are sold to outsiders, there will also be an additional entry, as follows:

Dr. Outside Customers' Charge Accounts (control)	$xxxx	
Cr. Manufacturing Profit and Loss		$xxxx

The balance of the "Manufacturing Profit and Loss" account, after these entries, will be ready for transfer to the general profit and loss summary.

In the entries above given it is indicated that the credit for merchandise sold or transferred from the factory will be carried directly to the departmental profit and loss account. It is quite possible, of course, that the items may be first entered in some temporary revenue account (called "Factory Sales" perhaps), this account being closed into the profit and loss account of the department at the end of the fiscal year. If there is such a "Factory Sales" account on the books, there will be one additional step in the bookkeeping procedure, but the final result of the entries will be unchanged.

No adjustment for factory inventories of work in process or finished goods is shown in the above entries. Where such items require recognition they will be set up as charges and credits to the "Manufacturing Profit and Loss" account according to one of the methods previously described in the case of merchandise inventories.

In the case of buildings owned, the procedure will be practically identical. Another group of expense accounts will have been provided in the voucher register or purchase distribution book and the entry from this record (assuming the existence of all the activities mentioned) will now be expanded in the following form:

Dr. Merchandise—Store No. 1	$xxxx	
Operating Expenses—Store No. 1 (in detail)	xxxx	
Merchandise—Store No. 2	xxxx	
Operating Expenses—Store No. 2 (in detail)	xxxx	
etc.		
Merchandise—Central Warehouse	xxxx	
Warehouse Expenses (in detail)	xxxx	
Handling Expenses (in detail)	xxxx	
Administration Expenses (in detail)	xxxx	
Manufacturing Expenses (in detail)	xxxx	
Raw Materials—Factory	xxxx	
Building Expenses (in detail)	xxxx	
Cr. Vouchers Payable (or Accounts Payable)		$xxxx

At the end of the period the various building expenses will be transferred to another subsidiary profit and loss account in the following manner:

Dr. Building Department Profit and Loss..................	$xxxx	
Cr. Building Expenses (in detail)...................		$xxxx

The corresponding revenues will also be entered in the same account through a recapitulation of all the rental charges in somewhat the following form:

Dr. Operating Expenses—Store No. 1 (Rent)................	$xxxx	
(for each store in an owned building)		
Outside Tenants' Charge Accounts (control).............	xxxx	
Cr. Building Department Profit and Loss...........		$xxxx

The balance of this last account also will be transferred to the general profit and loss summary at the conclusion of the period.

A portion of the above entries are, properly speaking, closing entries. A further discussion of closing entries, with particular reference to the closing of trading or store operating accounts, is given in Chap. XIII.

CHAPTER XI

GENERAL BOOKKEEPING RECORDS—THE JOURNALS

As the various elements of an accounting system for a chain enterprise have been made the subject of discussion in previous chapters, there has been frequent reference to the head office and the general accounting department. As in all well-developed organizations, any specialized activity such as the maintenance of accounting records will be handled, so far as possible, by a separate department, made up of individuals of special training and experience in that particular line of work. The accounting records of an individual retail merchandise establishment must usually be kept in spare time by various store employees having little knowledge of the subject The financial and operating data of the chain enterprise, on the other hand, are assembled and verified almost exclusively by a special staff employed solely for that purpose.

The organization of the chain store accounting department will depend on the nature and extent of the business. In a small chain the entire head office accounting and bookkeeping work may be taken care of by a single individual, assisted possibly by another employee who handles store collections, bank deposits, and strictly financial matters. In a larger chain the head office accounting department will probably consist of a number of bookkeepers and clerks performing various functions. The executive in charge of this force may have the title of "controller," or perhaps simply be termed "office manager" or "chief accountant." In a very large business he may have several subdepartments under him, each with its own head—merchandise records, cash accounting and payrolls, manufacturing department accounting, ordering, etc.

It is not the purpose to describe here the organization of the accounting department as to personnel or apportionment of duties. There is too much variation in the requirements of different concerns and individual preferences to make possible any satisfactory generalization on the subject. It is intended,

however, to indicate in the remaining chapters of this book what sort of records will be maintained by this head office accounting department, what is involved in handling these records, and how the information which they contain may be analyzed and interpreted for the benefit of the management of the concern. Brief and passing references have been made to various general office records; the purpose of those records and the manner in which they fit into a comprehensive system of accounts can now be explained in greater detail.

Books of Account—Function of the Journal.—The foundation for all complete records of financial history and position is a set of coordinated books of account kept on the so-called double-entry system. Under this system the data as to all transactions in which the concern has a part are gathered together, classified, and set down in permanent form, according to a scientific procedure which expresses fully the nature and effect of each transaction and produces always the same result for the same set of circumstances.

The theory of double-entry bookkeeping—the equilibrium of charges and credits—is covered at length in many textbooks and bookkeeping courses, and will be discussed here only in its application to the problems of the chain store enterprise. The method provides a complete and unified record of the business history, makes possible ready verification of the accuracy of the bookkeeping records, and has other advantages too numerous to mention at this point.

The general books of account maintained as part of such a system fall into two classes. The first of these are commonly called journals. In a journal is kept a chronological record of business transactions in terms of the debit (or charge) and credit elements of each transaction. There may be a single journal for all transactions, or various journals for transactions of different character, but in each the happenings are recorded one after another just as they occur, with merely sufficient description to show the nature of the transaction and its effect on the position of the business from a financial standpoint.

The books of account of the second class are termed ledgers. In a ledger the results of business transactions are grouped and classified so that the affairs of the concern, in terms of the several elements making up its financial position and history, may be expressed in condensed and intelligible form. Where the

journal sets out transactions in their chronological order, the ledger summarizes these transactions according to the elements recognized as making up business history and condition.

To those familiar with double-entry bookkeeping procedure, the determination and designation of the debit and credit element in each transaction will be clear without further explanation. In the simplest type of business the journal used to record transactions taking place might be a record provided only with space for a description of the transaction, the accounts affected, and the respective amounts of the debits and credits involved. Inasmuch, however, as it is sooner or later desired to classify and group the items affecting each account, the number of columns in the journal is almost always increased so that each account receiving frequent charges or credits may have a column of its own. This is to facilitate summarizing of the results at the end of a period. Such an expansion of the journal quickly transforms it into a multi-column record of somewhat complicated aspect, in which all the frequently used accounts have their own particular debit and credit spaces.

It is a natural step in the development of a journal to substitute for the single form, covering all transactions, a number of specialized journals, each one having to do with one particular phase of the business. Normally there are certain types of transactions in an enterprise which occur with such frequency and are of such uniform character that they can be recorded more satisfactorily in a separate journal specially adapted to their presentation. As the business grows larger, more and more types of transactions fall into this class, since there is a constantly increasing number of transactions of each kind. The operations of a chain enterprise involve so many units that the use of a number of journals is usually essential to the satisfactory handling of the bookkeeping work.

Before a discussion of specialized journals is undertaken, however, it may be noted that they are not always required, even in a chain enterprise. Where only a few stores are operated and the complexities of the business are few, it may be possible to design a single journal to answer all purposes. Such a form has its advantages. An illustration is given in Fig. 38 of a combination general journal designed to cover the operations of a small chain enterprise. In this form a short sheet is inserted for recording the operations of each retail store, while the two longer sheets

Left-hand Long Sheet

BLANK STORES COMPANY — COMBINATION GENERAL JOURNAL													
Date	Particulars	Ref. No.	Cash Collections		Bank		Accts. Rec.		Accts. Pay		General Accounts		
			Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.		Dr.	Cr.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

Right-hand Short Sheet

STORE NO. ______										
Income		Expense						Sundries		
Sales		Mdse.	Wages	Lt.& Heat.	Wrappings	Repairs		Descr.	Amt.	Amt.
Cr.	Cr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.		Dr.	Cr.
(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)

Left-hand Short Sheet

STORE NO. ______										
Income		Expense						Sundries		
Sales		Mdse.	Wages	Lt.& Heat.	Wrappings	Repairs		Descr.	Amt.	Amt.
Cr.	Cr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.		Dr.	Cr.
(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)

Illustrative Entries

Cash Sales of Store No. 1:
Dr. Column 4; Cr. Column 15.

Cash Deposited in Bank:
Dr. Column 6; Cr. Column 5.

Merchandise Bought on Credit for Store No. 1:
Dr. Column 17; Cr. Column 11.

Account Payable Paid by Check:
Dr. Column 10; Cr. Column 7.

Wages Store No. 2 Paid by Check:
Dr. Column 29; Cr. Column 7.

Cash Received on Account Receivable and Deposited in Bank:
Dr. Column 6; Cr. Column 9.

Right-hand Long Sheet

ADMINISTRATION AND MISCELLANEOUS																
G.O. Salaries	G.O. Wages	G.O. Rent	Staty.&Prtg.	Tel.&Tel.	Misc. Suppl.	Legal	Travel	Advtg.	Interest			Pur. Disct.	Mis. Inc.	Sundries		
Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Dr.	Cr.	Cr.	Descr.	Dr.	Cr.
(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)

FIG. 38.—Combination General Journal.

This form may be used by a chain store concern of moderate size where the number of bookkeeping entries is limited and the complications of the business are few. In this journal may be recorded all transactions of the business, spaces being provided for the debit and credit element of every sort of transaction. The left-hand long sheet covers the general and more frequently used accounts; the right-hand long sheet the general expenses and miscellaneous items. The short sheets inserted will cover the operations of the retail stores, each store requiring one side of a sheet for its entries. The record will be serviceable where the number of stores is small, but becomes cumbersome if too many short sheets have to be inserted.

are given up to columns for the general accounts of the business as a whole.

This form may best be utilized where the transactions are first condensed by means of recapitulations and summaries for each type of transaction, the totals only being placed in this general journal. It will be readily perceived that unless this is done—and to a certain extent in any case—a great deal of paper will be left blank on every page and the record of the transactions of a period will form a bulky and somewhat cumbersome book.

Cash Receipts and Disbursements Journals.—The first items usually entitled to separate treatment in a specialized journal are those involving the receipt and disbursement of cash. Cash receipts in a chain enterprise occur in considerable amount every day and affect a relatively small number of accounts. The logical procedure, therefore, is to prepare and utilize a special record having columns only for the accounts affected by such transactions. With these items removed from the general journal its bulk will be materially reduced and there will be less variation in the types of items which it contains.

Similarly, cash disbursements form a frequent class of transactions which may easily be handled through a separate journal of special form. In each case where such a separate journal is provided, the complexity of the general journal is diminished and bookkeeping work in the head office is facilitated through the possibility of several clerks working at once on different journals. Only one clerk can work on the records if a single journal is employed.

Various types of cash receipts record have already been discussed in connection with Chaps. III and IV. Regardless of their form, or their similarity to a journal ruled according to a standard formula, these cash receipts records will constitute a true journal. The form will answer all practical purposes if it provides the properly classified totals of debits and credits affecting the ledger accounts in which the management is interested. The ruling of journals will differ according to circumstances, the illustrations given in Figs. 4, 5, 6, and 11 being representative of types commonly required for a chain enterprise.

The cash disbursements record has been referred to at various points in the preceding chapters, but has received no detailed comment. Like the other records, its form will vary according to operating conditions and general accounting procedure.

Where a voucher register is employed—another sort of specialized journal, it may be noted—the cash disbursements record will be nothing more than a check register, as all the information regarding distribution of charges is contained in the voucher register. Every payment to be made under such a plan is set up first as an obligation to be met (a voucher payable), and the check register simply records the withdrawal of cash from the bank account in satisfaction of the obligation recognized in the voucher register. The only additional element which may enter is that of purchase discounts. The check drawn may differ from the face amount of the invoice by a permitted discount and the check register may, therefore, have to include a discount column. An illustration of such a record is given in Fig. 39.

BLANK STORES COMPANY

CASH DISBURSEMENTS RECORD

(CHECK REGISTER)

Page Number

Date	Name of Payee	Check No.	Voucher No.	√	Amt. of Check Cr.-Bank	Discount Cr.-Purch Disct.	Amt. of Voucher Dr.-Vouch. Pay.
Total							

FIG. 39.—Cash Disbursements Record.

This simple form of cash disbursements record may be used where all items are vouchered and distributed through the voucher register. Under such circumstances the check register needs to contain money columns only for the amount of the check, the discount taken, and the amount of the voucher being paid. Where some items paid are distributed direct from the cash disbursements record without being first entered through the voucher register, a different form is required, as illustrated in Figs. 40 and 41. It is assumed in all these cash disbursements forms shown that cash is handled on the imprest system and that all payments are made by check.

In this procedure every payment made must be vouchered regardless of its nature. Often a concern may consider it desirable to voucher only such payments as are made on presentation of invoices. Sundry disbursements may be made to cover items which do not pass through the voucher register. In such cases the check register will be expanded to include either a single "Sundries" or "Miscellaneous" column, or possibly several columns for various accounts. Where such unvouchered disbursements are few, a single column is ordinarily sufficient. If checks are drawn on several banks, however, there may be

required a number of columns for the different bank accounts, as shown in Fig. 40.

BLANK STORES COMPANY

CASH DISBURSEMENTS BOOK

Page Number

Date	Name of Payee	Check No.	Voucher No.	Credit				Debit			
				First Nat'l Bank	United States Nat'l B'k	Central State Bank	City Trust Co	Vouchers Payable	Sundries Account	Sundries Amt.	Bank Transfers
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

FIG. 40.—Cash Disbursements Book.

This form of cash disbursements book provides for entering checks drawn on four different banks in payment of vouchers and also of unvouchered items. The debit amount for any payment previously distributed through the voucher register will be entered in column 9, while other items will be distributed through columns 10 and 11. The handling of transfers between banks is discussed in the text.

Still further expansion of the cash disbursements book may take place if a purchase distribution journal of the type referred to in Chap. V is used in place of a voucher register. Here there will undoubtedly be a considerable number of items passing through the cash disbursements book without finding their way into the purchase journal. Payments of those items which have been put through the purchase journal and credited to an account payable will all be charged through a single column to the "Accounts Payable" control account; they will also be posted individually to the account of the particular creditor in the accounts payable subsidiary ledger. All other items, however, will be charged direct to the ledger account affected, and separate columns will be provided for items of frequent occurrence. An example of the type of cash disbursements book which may be used under such conditions is given in Fig. 41.

Payrolls—Bank Balance Records.—The item of payrolls, which plays so large a part in a manufacturing enterprise, may be a minor consideration in a chain enterprise—particularly one of the self-service type. Where a large number of employees are concerned, however, a payroll should be prepared for each store or other department, showing the name of the employee, time worked, and wages due. These payrolls should be approved by the store manager and countersigned by some responsible executive before the wages are disbursed.

When the number of employees is small and the payment period coincides with the basic accounting period of the concern, the payrolls may be used simply as a guide in preparing the checks, which will be entered individually in the cash disbursements record and charged to the appropriate "Wages" expense account. Where the matter is more complicated, however, the payrolls may require to be vouchered or passed through the purchase distribution journal, in which case the checks drawn will be charged to "Vouchers Payable" or "Accounts Payable," as the case may be.

BLANK STORES COMPANY
CASH DISBURSEMENTS BOOK
Page Number

Date	Name of Payee	Check No.	Amount	Discount	Accounts Payable	Distribution of Charge: Retail Stores Descr.	Retail Stores Amt.	Warehouse Descr.	Warehouse Amt.	General Descr.	General Amt.
			Cr.	Cr.	Dr.		Dr.		Dr.		Dr.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)

Fig. 41.—Another Form of Cash Disbursements Book.

This form of cash disbursements book may be used in connection with a purchase journal (as distinguished from a voucher register). It is assumed here that many items are charged direct from the cash book, and columns are provided, accordingly, for distributing these charges. In the illustration, "sundries" columns only are shown, although special columns for individual expense accounts might be used if any one type of item occurred very frequently. Items previously set up as accounts payable through the purchase journal will, when paid, be charged in column 6. It is understood that all payments are made by check and that any currency disbursements are handled out of a petty cash fund kept on the imprest system.

Where the payroll periods overlap the basic accounting periods, it may be necessary to split some of the payrolls into two parts, so that the proper charge may be carried into the expense accounts of each period. Half of the payroll, for example, may be vouchered and distributed in one period and the other half in the following period. This will not prevent a single check being drawn for the aggregate amount of wages due each employee for the pay period, as shown by combining the amounts on the two "split" rolls.

Sundry other records are often required in connection with the handling of cash. It is essential, for example, that the balance

on deposit in each bank account be known at all times. If a single bank account is carried, the balance may quickly be ascertained from the journal columns showing the total deposits and withdrawals during the period, with the necessary adjustment for the balance on hand at the beginning of the period. Where a

BLANK STORES COMPANY

DAILY REPORT OF BANK BALANCES

Date__________________

	First National Bank		United States National Bank		Central State Bank		City Trust Company		Combined	
Balance on Deposit - Close of Business Yesterday										
Add: Cash Received and Deposited										
Deduct: Checks Drawn (excluding transfers)										
Add or Deduct: Transfers between Banks										
Balance on Deposit - Close of Business Today										

DETAILS

Receipts			Payments	
Cash Sales			Vouchers	
Store No. 1			Merchandise	
" " 2			Store Wages	
" " 3			Store Expenses	
" " 4			Warehouse Wages	
" " 5			Warehouse Expenses	
" " 6			General Office Wages	
" " 7			General Office Expenses	
" " 8				
Other Items				
Bank Loans			Other Items	
Accts. Rec. General			Bank Loans Repaid	
			Interest	
Total (as above)			Total (as above)	

Fig. 42.—Daily Report of Bank Balances.

This form may be used for a daily report of the amounts on deposit with the various banks, providing that information is not carried on check stubs. When a separate cash receipts and cash disbursements book is used (as will ordinarily be the case in chain enterprises), the cash books themselves do not show the balance on hand, and some additional record is, therefore, necessary. Where the management requires a classified report of each day's receipts and disbursements, the information may be supplied in the lower portion of the form here illustrated. This portion of the record, of course, is optional. If preferred, the information may be accumulated for the month to date instead of being shown as a separate report of each day's transactions. The first line would then show the balance on deposit at the beginning of the month, and the amounts received and disbursed would be the totals for the month to date, taken from the cash receipts and disbursements books respectively.

number of bank accounts are kept, however, there may be no little work involved in bringing the balances down to date. A suggested form of daily bank balance report is given in Fig. 42.

Here the deposits and checks of each day are shown, with their effect on the deposit balance.

Practically the same form may be used for a report of changes for the month to date, if that is preferred. In that case during each period the amount shown on the first line (balance on hand at beginning of period) would remain unchanged. The totals added and deducted could be found by taking the footings to date of the appropriate columns in the cash receipts and cash disbursements records. Where checks are secured in books with stub spaces provided for making reconciliations, it may be equally satisfactory simply to carry a running balance for each bank on the stubs.

Another problem which presents itself where a number of bank accounts are carried has to do with transfers between banks. This is solved by the inclusion in both the cash receipts and cash disbursements book of a column headed "Bank Transfers." In the cash receipts book all deposits which are transfers from other banks are credited in this "Bank Transfer" column; correspondingly, in the cash disbursements book all checks drawn for deposit in one of the other banks are charged to a column carrying the same title. The total amount in these columns will, of course, correspond, and when their agreement has been proved it will be unnecessary to post either of them to a ledger account.

It has been assumed in the preceding discussion that all disbursements are made by check. Where petty expenses are paid by the stores out of cash receipts, provision should be made for recognizing that element through a special column in the cash receipts book (see Fig. 6). Where such petty expenses are separately reported and the store cash fund is reimbursed from the head office, a check will be drawn for the amounts in the ordinary way and the charge will find its way into the ledger through the medium of the cash disbursements book. The operation of the imprest system has already been described in full and needs no further reference here. The matter of reconciling bank accounts is taken up in connection with the balance sheet accounts in Chap. XIV.

Purchase and Sales Journals.—Since in a chain store concern the transactions occurring most frequently are those involving the receipt or disbursement of cash, they are the first to be taken out of the general journal and embodied in a separate specialized

record. All other transactions—such as buying on credit, selling on credit, interstore and intracompany transfers, and the like—may be left in the general journal. If the business is large, however, and the volume of any particular type of transaction becomes considerable, it is a natural step to develop and utilize still other special journals.

The first of these to be adopted is ordinarily the purchase journal or voucher register. In such a journal will be entered all purchases made or expenses incurred where payment is not made immediately in cash but at some future time after presentation by the vendor of an invoice. The entry in the journal recognizes the creation of a liability and the acquisition of certain property or services which will play a part in the operations of some department of the business.

Illustrations of the form of such journals have been given in preceding chapters, Figs. 16, 17, and 32. The basis of each entry has been assumed to be an invoice from a vendor-creditor. In dealing with these vendor-creditors there will, of course, frequently arise other transactions beside straight purchases—returned goods, claims for shortages, poor quality, etc. In these cases a credit memorandum may be expected from the vendor and this credit memorandum will have to be entered in one of the journals of the business. It may be passed through the general journal, as a charge against the vendor and credit to merchandise or expense. Inasmuch, however, as it is desirable to record all transactions with vendors in a single journal if possible, the usual procedure is to incorporate the credit memoranda in the voucher register or purchase journal. This is accomplished either by entering such items in red ink and considering them as of opposite effect to invoices (subtracting the red amounts from the total of the ordinary black amounts), or by setting aside a separate section of the book for entering credit memoranda and summarizing and posting them independently.

Another type of transaction which may become so numerous as to require a separate journal is the "charge sale," which was discussed at length in Chap. IV. Where the enterprise does a large business with retail charge customers there will be regularly recurring entries to express the sale of merchandise and the creation of a claim against the customer. When these entries become numerous, it is desirable to place them in a separate record—a "charge sale" journal. For convenience this may be made

simply a part of the cash receipts record, as suggested in Chap. IV and illustrated in Fig. 10. It may, however, be an entirely separate record, containing such column rulings as are required to show the charges against customers and the credits to various "sales" accounts covering different departments or products.

Where the concern operates a manufacturing department and sells the product of that department to outsiders, on credit, a sales journal becomes a practical necessity. Regular invoices will be issued by the factory for all goods shipped out and these invoices will be recapitulated in some manner before being posted to the general ledger accounts. The form of such a recapitulation—in reality a sales journal in itself—was suggested in the footnote accompanying Fig. 36. It will be understood that credit memoranda issued to customers will also be handled through a journal of this sort, in the same way that vendors' credit memoranda are usually entered in the purchase journal or voucher record.

Other Journals.—There have now been presented for consideration four separate or specialized journals which may be used in addition to a general journal—one each for cash receipts, cash disbursements, credit purchases and credit purchase adjustments, and charge sales and charge sale adjustments. These are the special journals most frequently used. It should be borne in mind, however, that the adoption of a new journal is a simple matter and may take place at any time that it is found desirable to record or recapitulate separately any particular type of transaction. For such records there may be used simply standard columnar sheets, bound or loose-leaf. The totals of the recapitulation may be carried into one of the other journals as a single entry covering the period as a whole, but generally the amounts are posted direct from the recapitulation, which then becomes in reality an independent journal of a particular type of transactions.

An example of such a journal would be a recapitulation of merchandise transfers between stores, or merchandise deliveries from warehouse to stores; these are discussed in Chaps. VI and VII. Here are a large number of transactions, all of the same character, which can be most easily set down in a record designed especially for them. Journals of this character were illustrated in Figs. 27, 35, 36, and 37; other forms for handling similar transactions will suggest themselves.

In some cases it may be found impossible to incorporate in the journal adopted all the information required regarding one particular feature of the transaction involved. For example, a voucher register may not provide sufficient space for entering in a separate column each subdivision of expense for each store in a chain. To overcome this difficulty the voucher record may be supported or amplified by a subsidiary expense record in which the expenses can be classified more carefully than is possible in the main journal. An arrangement of this type is indicated in the illustrations in Figs. 32 and 33. It is, of course, applicable to other features of the accounting work as well.

After all the specialized journals have been adopted and placed in operation, there still remains a last or "general" journal in which will be recorded all transactions which find no place for expression in the other journals. Where specialized journals have been drawn up to provide for all the ordinary and frequent transactions of the business, this general journal will contain only the exceptional and unusual items, and those periodic notations respecting operating results which are known as adjusting and closing entries. It will ordinarily be the aim of the bookkeeper to keep the general journal free from minor and unimportant adjustments and corrections which can be carried through one of the specialized journals, and to reserve it for entries of genuine moment in the history of the business.

Among these will naturally fall those adjustments of the current amount of prepaid and accrued items, inventory adjustments, depreciation allowances, bad debt losses, and the like. Here will also be shown those entries which record the redistribution of intracompany charges which do not have a separate journal for their expression. At the close of the period the transfer of income and expense accounts to the profit and loss summary, including the cumulation of subsidiary department profit and loss figures, will be accomplished through entries in the general journal. This feature of the bookkeeping has already been referred to and is further considered in Chap. XIII. The final closing of the "Profit and Loss" account and the allocation of profits to the owners of the business (discussed in Chap. XIV) is also carried out through entries in the general journal.

The form of the general journal will vary with the demands to be made upon it. The journal may embody as many columns as there are accounts receiving frequent charges and credits.

Where specialized journals are used for most ordinary transactions, the general journal may be a simple two-column affair, with spaces merely for date, description, debit amount, and credit amount. Such a form will answer the purpose in the large majority of cases.

CHAPTER XII

GENERAL BOOKKEEPING RECORDS—THE LEDGERS

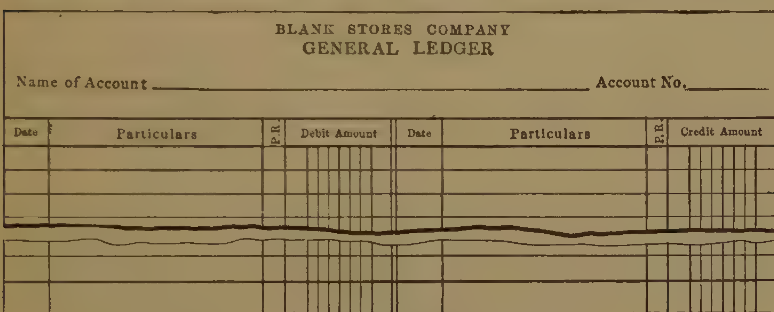
When an enterprise has adopted and placed in use a set of journals designed to cover the various transactions incident to the conduct of its business, a means has been provided for recording those transactions in strict chronological order, but without regard for the status of any particular element of the business, either at a point of time or over a period. One journal may show, for example, the amount of cash coming into the business, while another shows the amount being disbursed, but neither shows the amount of cash on hand at any time. Similarly, different journals, or parts of the same journal, may carry particulars of various merchandise transactions, but none of them shows the entire history of merchandise bought, sold, and on hand.

Function of the Ledger—Account Classifications.—It becomes necessary, therefore, in completing a set of accounts to provide another type of book, distinct from the journals, the function of which is to classify and present in intelligible form the results of all the transactions which have taken place. This book is known as a ledger. In it appears a separate sheet, or "account," for each element in the business history. These elements are ordinarily taken to include all the assets and liabilities of the concern and the principal features of the profit and loss account—sales, cost of goods sold, expenses, etc. The particulars of all transactions affecting any element are taken from the historical record in the journals, grouped, and set down (or "posted") in the ledger account covering that element. Since the information in each account is added each period to that which has gone before, the accounts compose both a history of the business by elements and an up-to-date record of the current status of each element.

The fundamental of the double-entry system is the expression of every transaction in terms of debit and credit. The journals of the business are designed to show the amount and nature of the debit and credit due to every happening taking place in the enterprise. The ledger accounts, therefore, become collections

of the debits and credits applicable to each asset, liability, income, and expense element of the business. The account sheet or page in the ledger is commonly divided in halves, the left half being reserved for debits and the right for credits. Each half is ruled like the other, with columns for date, particulars, and amount of the entries to be posted. This standard form of ledger sheet is illustrated in Fig. 43. Other somewhat similar forms are also widely used. The ledger is usually a loose-leaf book, capable of expansion as the business grows.

The perplexities of the accountant begin when an attempt is made to lay out a set of accounts for the enterprise. Each important element of the business requires a separate account,


BLANK STORES COMPANY
GENERAL LEDGER

Name of Account ____________________ Account No.________

Date	Particulars	P.R.	Debit Amount	Date	Particulars	P.R.	Credit Amount

FIG. 43.—General Ledger Account Sheet.

This illustration shows a standard form of general ledger account sheet. These sheets may be secured in several sizes and ordinarily come in loose-leaf form for use in a standard binder. The form is suitable for handling control accounts and general accounts of no special characteristics. It may, in fact, be used for any kind of account, although in the case of certain subsidiary ledgers a specialized account form is preferable.

in order that its history and current status may be determined at any time. But which are the important elements of a business? Some of them are obvious and unquestioned—cash, merchandise, accounts payable, sales, wages, for example. On other points there may be a doubt as to whether an individual item is of sufficient importance to entitle itself to a separate ledger account or may better be grouped with other minor and miscellaneous items. Each account means separate grouping in the journals of the items affecting it, additional postings, another sheet in the ledger, and so on. Economy of bookkeeping work, however, is false economy if it leads to obscuring the facts by a failure to provide enough account classifications for intelligent analysis of the results of operations.

Certain main groups of accounts naturally outline themselves when the requirements of an enterprise are considered. A classification of accounts will usually first recognize these groups and then make such subdivisions under each as seem to be demanded by the particular circumstances. Among the assets are normally found cash (in bank and on hand), accounts receivable from customers, merchandise, prepaid expenses, permanent (or "fixed") equipment, and possibly intangible property (such as trade-marks, goodwill, etc.). The liabilities include accounts payable to trade creditors, loans, accrued expenses, mortgages (or other long-term debts), and some kinds of reserves. The income or revenue group is made up principally of sales and sales adjustments (returned goods, allowances, etc.). The cost or expense group comprises cost of merchandise sold and expenses of operation, the latter rather extensively subclassified. Still another group covers the proprietorship or ownership accounts, representing the interests of the owner or owners in the business.

The natural procedure in laying out a ledger would seem to be to open an account for each element as it presents itself, arranging the ledger sheets in alphabetical or other satisfactory order. In a chain store enterprise, however, this simple solution of the problem is far from being adequate. This is due to the fact that the business is composed not only of a number of elements of the sort mentioned, but is also split up into a number of retail units, each having a history and certain assets of its own. The accounts originally decided upon must, therefore, in a chain of stores be multiplied by the number of units in the chain. The result is a multiplicity of accounts which crowd an ordinary ledger, render it unwieldy, and make the classification impossible of easy handling except after modification and careful arrangement.

Subsidiary Ledgers.—The first step in modifying the classification is usually the adoption of a so-called "subsidiary" ledger for each group of accounts comprising a large number of individual accounts of the same general character. Accounts receivable from customers constitute such a group; there may easily be a great many such accounts, each of relatively small amount, and their significance to the business rests in the total amount of the outstandings rather than the amount of individual charges. Similarly, there may be accounts representing merchandise in each of 20 or 30 retail stores, while the management may be primarily interested in the amount of merchandise

in all stores rather than in any particular one. In such cases, provision may be made to show in the general ledger a single account carrying totals for the group, while in another or subsidiary ledger there may be set up separate accounts for each element in the group.

The operation of a subsidiary ledger is not a particularly difficult matter. It has been discussed in connection with handling the accounts of customers in Chap. IV. Briefly, the procedure is to provide some means of accumulating a total of all the entries from the various journals affecting the group or "control" account involved, and to post this total in the general ledger control account, while the details are posted individually in the subsidiary ledger accounts. Thus the control account shows the aggregate of all debits and credits to all the subsidiary accounts. As a consequence, the balance of the control account (excess of total debits over total credits, or *vice versa*) will be equal to the total of all the balances in the subsidiary ledger accounts.

Where a control account and a subsidiary ledger are used, the journals are ordinarily so designed as to facilitate the bookkeeping work in connection with such accounts. Usually a separate column is provided for each control account; the total of the column then becomes a posting in the general ledger account (the control), while the individual entries in the column are carried into the subsidiary ledger accounts affected, either item by item or properly subgrouped. In some cases the subsidiary account postings are taken from some other source (as invoices, sales slips, etc.) and only the total of all these items is entered in the journal. The operation of control account and subsidiary ledger is, of course, the same in such a case as in any other.

The so-called subsidiary ledger may be in form not a ledger at all. Where a voucher register is in use the open items (*i.e.*, the vouchers against which no check has been drawn at the end of a period) constitute the supporting detail for the control account, and no ledger is used for the accounts payable to individual creditors. In the case of the "Warehouse Merchandise" account the subsidiary details may be kept on stock cards, as described in Chap. VII. These cards take the place of a subsidiary ledger, and a total of the balances shown by them should support the balance in the control account, just as do the balances of more formal ledger accounts used in other cases.

Arrangement of Accounts in the Ledger.—The use of subsidiary ledgers to relieve the general ledger of excessive detail is one step in adapting an account classification to the requirements of a chain store enterprise. A second and equally important step is the arrangement of accounts in the ledger. With a large volume of clerical work to be handled, it is important that the accounts to be dealt with be placed in a logical, consistent order, which will facilitate posting and also make it easy to draw from the ledger the information which may be required at any time. Not only must the accounts of minor importance be separated and covered by a control account, but the major elements must be properly grouped to reduce mechanical difficulties and increase the usefulness of the data compiled.

The general plan of arrangement may follow one of two lines. Under the first the operating units within the business form the basis for grouping the accounts. Store No. 1 of the chain, for example, will have a section of the ledger and all accounts having to do with that store will be placed in its section, regardless of whether they represent assets, liabilities, income, or expense. Under the second method the character of the account—asset, expense, etc.—becomes the basis for the grouping. All merchandise accounts, for example, will fall in one group, whether the goods be in the central warehouse, the manufacturing department, or one of the stores. Each method has certain advantages, as noted below.

As in the case of the operating expenses, discussed in Chap. IX, it is impossible to present a list of the accounts to be opened in a general ledger which will meet the needs of all chain enterprises, or of any particular one. There are too many individual variations and preferences to permit such a generalization. It can be indicated, however, what types of account will normally be required and how these may satisfactorily be grouped. Obviously, some of the accounts and groups suggested will not be required by every business, while additional ones may in some instances be demanded.

Whatever grouping is adopted, some attention will necessarily be given to the four main classes of accounts—namely, assets, liabilities, income, and expense. These classes will form either the general outline of the classification or else subgroups under other general headings. The favored order of arrangement within the asset and liability classes is from the most current or immediate

to the most fixed or deferred. It will be noted that this order has been adopted in the groupings suggested below.

It may also be noted that the arrangement involves the use of accounts of the so-called "perpetual inventory" type for all merchandise, prepaid expense, and accrued expense items. In other words, the payment made for merchandise, supplies, services, etc. is treated as creating an asset, and the portion of this asset consumed in operations is transferred to a "nominal," or "profit and loss," account only by subsequent journal entry. This feature of the accounting work has been previously discussed in Chaps. VI and IX, and is referred to again in the next following chapter.

Grouping Accounts by Operating Units.—Where the operating unit is made the basis of grouping the accounts, the principal units are, of course, the various retail stores of the chain. Each such unit has its own income and its own expenses, and each will ordinarily have also certain assets which are allocated to it even if not, strictly speaking, its own property. Liabilities, with the possible exception of accrued expenses, are ordinarily not allocated by stores; in the nature of things they are treated as obligations of the business as a whole. Prepaid and accrued expenses also may perhaps best be similarly treated, although in the classification below they are shown as subclassified by operating units.

In addition to an account group for each store, there will also be a group for each other unit, which may include several collateral or subsidiary activities. Such of those activities as occur frequently are mentioned here.

The ordinary groups and the accounts generally found in each will, therefore, be the following, assuming a chain of ten retail stores with several collateral activities.

1. Store No.1:
   - (*a*) Petty Cash Fund
   - (*b*) Cash in Bank
   - (*c*) Customers' Accounts Receivable (control)
   - (*d*) Merchandise
   - (*e*) Prepaid Expenses (in detail)
   - (*f*) Permanent Equipment (in detail)
   - (*g*) Reserves for Depreciation (in detail)
   - (*h*) Accrued Expenses (in detail)
   - (*i*) Sales (classified as required)
   - (*j*) Sales Returns, Allowances, etc.
   - (*k*) Cost of Merchandise Sold

(*l*) Store Operating Expenses (in detail)
(*m*) Store Profit and Loss Summary

2–10. Stores No. 2 to No. 10 (similar group for each store)

11. Storage and Handling:
(*a*) Petty Cash Fund
(*b*) Merchandise
(*c*) Operating Supplies
(*d*) Prepaid Expenses (in detail)
(*e*) Permanent Equipment (in detail)
(*f*) Reserves for Depreciation (in detail)
(*g*) Accrued Expenses (in detail)
(*h*) Warehouse Operating Expenses (in detail)
(*i*) Delivery and Handling Expenses (in detail)

12. Manufacturing:
(*a*) Cash (detail as required)
(*b*) Customers' Accounts Receivable (control)
(*c*) Finished Merchandise
(*d*) Goods in Process
(*e*) Raw Materials
(*f*) Prepaid Expenses (in detail)
(*g*) Permanent Equipment (in detail)
(*h*) Reserves for Depreciation (in detail)
(*i*) Accrued Expenses (in detail)
(*j*) Sales to Stores
(*k*) Sales to Outside Parties
(*l*) Cost of Materials Consumed
(*m*) Manufacturing Expenses (in detail)
(*n*) Factory Profit and Loss Summary

13. Building Operation:
(*a*) Tenants' Rentals Receivable (control or detail)
(*b*) Building Operating Supplies
(*c*) Prepaid Expenses (in detail)
(*d*) Real Estate, Buildings, and Equipment (in detail)
(*e*) Reserves for Depreciation (in detail)
(*f*) Accrued Expenses (in detail)
(*g*) Mortgages Payable
(*h*) Rentals Charged to Stores
(*i*) Rentals Charged to Outside Tenants
(*j*) Building Operating Expenses (in detail)
(*k*) Building Profit and Loss Summary

14. Administration and Miscellaneous:
(*a*) Administrative Expenses (in detail)
(*b*) General Expenses (in detail)
(*c*) Sundry Income and Expense Accounts (in detail)

15. General:
(*a*) Head Office Cash Funds (in detail)
(*b*) General Bank Accounts (in detail)
(*c*) Sundry Receivables (in detail)
(*d*) Accrued Income (in detail)

(*e*) Prepaid Expense (in detail)
(*f*) Office and General Permanent Equipment (in detail)
(*g*) Reserves for Depreciation (in detail)
(*h*) Accounts Payable to Trade Creditors (control)
(*i*) Notes Payable to Trade Creditors (control)
(*j*) Accounts Payable—Loans (in detail)
(*k*) Notes Payable—Loans (in detail)
(*l*) Sundry Payables (in detail)
(*m*) Accrued Expenses (in detail)
(*n*) Prepaid Income Received (in detail)
(*o*) Reserves (in detail)
(*p*) Capital Stock, or Owners' Capital Accounts
(*q*) Surplus, or Undivided Profits
(*r*) General Profit and Loss Summary
(*s*) Dividends, or Withdrawal Accounts.

If an enterprise of the size and character assumed were to build up a ledger along the lines indicated, it would rapidly become a ponderous affair. The list of titles just given would involve 186 accounts, if no detail were provided for under any of them. A normal amount of subclassification of the expense accounts alone would require at least 100 more accounts. The mechanical and physical difficulties of handling a ledger of such size render it impractical. Subsidiary ledgers and other records to relieve the general ledger of some of the detail become an absolute necessity.

Two points need to be emphasized in this connection. In the first place, there are means of combining and consolidating some of the accounts listed and maintaining good control over them, even if no formal subsidiary ledger is used. Items of prepaid and accrued expense may, for example, be combined into a very few accounts carried in the "General" section and their accuracy may be proved from time to time by merely checking up the supporting data contained in invoices or other records. Depreciation reserves are sometimes carried all in a single account, while a large calculation sheet serves as the "subsidiary ledger." By means of such devices, the size of the general ledger and the volume of detail may both be materially reduced.

The second point has to do with the size and character of the chain enterprise. Many chains, of course, comprise less than ten retail store units. Many have no manufacturing department and own no buildings. Some have no central warehouse. As the extent and complexity of the business are reduced, the number of accounts required shrinks measurably. For a small chain

of stores it may be altogether feasible to carry all the accounts in a single general ledger, except probably the details of accounts receivable and payable. In such cases the grouping above suggested may well answer all purposes.

Basic Accounts for Store Operations.—With the growth of the enterprise, it is generally the detail of store operating expenses that gradually produces an overbulky and cumbersome general ledger. If some method can be found for keeping the number of such accounts within limits, the arrangement will have considerable flexibility. Usually the object can be attained in one of several ways. The general procedure is to utilize for each store only three "nominal" (income and expense) accounts, in addition to the small number of asset accounts required. These are termed "Sales," "Cost of Goods Sold," and "Operating Expenses."

The "Sales" account under such circumstances will ordinarily carry not only the credits for all sales, but also the charges and credits for sales adjustments, such as returns, allowances, price corrections, and the like. If these latter items are numerous and of major importance, they may require separate accounts, as has been suggested at various points in the text of preceding chapters. Often, however, they are negligible and can be ignored except as minor adjustments in the amount of net sales. The "Sales" account then requires no analysis or supporting data unless there is a separation by departments or types of product. In the latter event the subclassification may be shown simply in a statement or report without appearing in the general books at all.

The same comment applies to the account covering cost of goods sold. It will receive charges through transfer to it of the amount determined upon as cost of merchandise sold and turned over to customers. This, of course, represents the primary offset to sales revenue, and requires no analysis or subclassification except as the "Sales" account itself is analyzed and subclassified.

Into the third of these nominal accounts will be carried all items of expense having to do with operation of the store. The voucher register and other journals used by the business will be designed accordingly and will have a single column for entry of all expense items of each store. The total of this column will be posted to the general ledger account, and the total of the

account will represent the total operating expense of the store. Obviously, this total must be analyzed and subdivided to furnish the management an intelligible picture of what is going on, but this analysis and subdivision may be done outside of the ledger. Some subsidiary record in ledger form may be used, but often the detail may very satisfactorily be presented in a statement or report of some kind, without formal entry in any book of account.

It goes without saying that in such a case the statement must be carefully drawn up, the amounts balanced with the ledger account, and a copy filed as a part of the permanent records. The journals must show clearly the subdivisions into which the items were carried, so that the figures may be traced back to their source at any future time. When those precautions are taken, however, the information is always available, in intelligible form, and accurately supporting the ledger account. For a hasty survey of the operating results of any store, in broad outline, the management may obtain quickly the balances of the three ledger accounts covering sales, cost of goods sold, and aggregate expense. These show total revenues and both gross and net profit, without the confusion or inconvenience occasioned by a long list of figures.

As suggested above, a report or statement may take the place of a subsidiary ledger. Reference to the various kinds of reports which may be advantageously used by the management is made in Chaps. XV and XVI. It is an interesting and profitable task to work up sets of statements which will serve the double purpose of managerial reports and bookkeeping records, thus eliminating duplication of clerical work and condensing the books of account to compact and concentrated form.

Grouping Accounts by General Type.—This compactness and concentration may sometimes be better accomplished by adoption of the second method of account grouping previously referred to, by which all items of the same general character are grouped under one control with subclassifications for the physical operating units. Where this plan is followed, the general ledger may be condensed to almost unlimited extent and all detail relegated to subsidiary records. Even in a large chain, the number of general ledger accounts might conceivably be reduced to 50 or less.

One advantage of the method is that modifications within the ledger may be gradually developed. If the business is growing

from a small to a large one, there will be possible a gradual adoption of control accounts and subsidiary records as they seem to be required. Whenever the character of the business results in complications along one particular line which demand a special and separate record for handling them satisfactorily, a single control may be established for that group of items with the detail carried in the subsidiary record.

Below are suggested the main groups which will probably be adopted in such a system. With the ultimate development of the plan, there would remain in the general ledger only a set of control accounts corresponding with the numbered headings in this list. Ordinarily, however, the development will have proceeded only part way and in some groups there will be accounts in the general ledger for certain subdivisions, as suggested by the lettered subclassifications under the main headings.

1. Petty Cash Funds (control)
2. Bank Accounts (control)
3. Accounts Receivable:
   - (*a*) to (*x*) Customers' Accounts (control—one for each store)
   - (*y*) Sundry Accounts (control)
4. Merchandise:
   - (*a*) Central Warehouse Stock
   - (*b*) Manufacturing Department Stock
   - (*c*) to (*z*) Retail Store Stocks (one for each store)
5. Prepaid Expense:
   - (*a*) Rent
   - (*b*) Insurance, etc.
6. Permanent Property, or Fixed Assets (control)
7. Reserves for Depreciation (control)
8. Accounts Payable:
   - (*a*) Trade Creditors' Accounts, or Vouchers Payable (control)
   - (*b*) Sundry Accounts (control)
9. Notes Payable (control)
10. Accrued Expense:
    - (*a*) Taxes
    - (*b*) Bonuses, etc.
11. Mortgages Payable, Long-term Debt
12. Reserves:
    - (*a*) to (*z*) Sundry Reserves (in detail)
13. Proprietorship:
    - (*a*) Capital Stock, or Owners' Capital Accounts
    - (*b*) Surplus, or Undivided Profits
    - (*c*) Dividends, or Owners' Withdrawals
14. General Profit and Loss Summary
15. Retail Store Operations:
    - (*a*) to (*x*) Store Operations (controls—one for each store)

16. Warehouse Operations (control)
17. Manufacturing Operations (control)
18. Building Operations (control—in case of owned real estate)
19. Administration Expense (control)
20. Sundry Income and Expense (in detail).

The manner in which the detail supporting the various controls is handled may easily differ in each group. In the case of petty cash funds kept on the imprest system, the amount of each fund is fixed and constant and there is, accordingly, little or no change in the detail. Under such circumstances a simple list of the funds and their amount is sufficient and a formal subsidiary ledger

BLANK STORES COMPANY

PROPERTY LEDGER

Class of Property ____________ Warehouse or Store No.__________ Gen'l Ledger Acct.No.____ Sub-Acct No.____

Date	Bought From	Item	Cost	Estim. Life	Deprec. Rate	Amt. of Depr. per Month	Reserve for Depreciation							Displaced	
							Prev. Total	1921	1922	1923	1924	1925	Total Forw'd	Date	Disposition
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)

Fig. 44.—Property Ledger Account Sheet.

This form may be used for recording details of the concern's permanent equipment, such as buildings, machinery, furniture, store fixtures, etc. The ruling given above provides for recording both the cost of each item and the accumulated reserve for depreciation. The amount of depreciation to be charged off each month will be determined from the total of column 7. At the end of a year the total amount of depreciation reserve accumulated on each item will be entered in the appropriate column (9, 10, 11, 12, or 13). At the end of a five-year period the total accumulated depreciation reserve on each item can be shown in column 14 and carried to a new sheet prepared for the next ensuing five-year period. The cost of items sold, scrapped, or otherwise displaced will be entered in red in column 4 under the current date, and the amount of accumulated depreciation reserve will also be entered in red in the appropriate columns. At the same time the notation of the date and disposition of the item will be made in columns 15 and 16 opposite the original entry.

would be superfluous. For bank accounts one of the several devices suggested in Chap. XI will ordinarily make easily possible identification of the amounts composing the aggregate balance on deposit with banks. Various methods for carrying detailed records of customers' accounts, merchandise, and prepaid expenses have also been suggested in previous chapters.

The accounts covering permanent property and equipment of the business (usually termed "fixed assets"), and also those for

the corresponding depreciation reserves, may be detailed in the general ledger or may be grouped in a single control account as indicated in the list above. Where the control account is used, a special record carrying details of the various land, building, and equipment items is ordinarily adopted. This record may be kept in a bound book, on cards, or on large sheets ruled up for the purpose. An illustration of such a sheet is given in Fig. 44; cards may be ruled to give similar information.

In this form special attention has been given to the depreciation factor; the columns provided for periodic depreciation allowances make possible the calculation of a monthly charge which will bear a known relation to the fixed assets involved. These columns also furnish an analysis of the reserve for depreciation, which otherwise is often no more than an incomprehensible jumble of charges and credits. This detailed record of fixed assets and their reserves is sometimes opposed on the ground that it involves excessive clerical labor and expense. It may fairly be stated, however, that it is a thoroughly practical form of property ledger, and in most cases is surprisingly simple and economical to maintain. Some further attention to the fixed asset accounts is given in a subsequent chapter.

Details of accounts payable to trade and other creditors are ordinarily contained either in a voucher register or a regular accounts payable ledger. Notes payable may be listed in a note register of standard form. Accrued expenses are handled in the same fashion as prepaid expenses, or are covered by informal memoranda when they are few in number. The other liability and proprietorship accounts generally appear in detail in the general ledger.

Operating Controls and Supporting Data.—The "operations" accounts represent groupings, by retail store and other operating units, of the revenue and expense items which make up the business history of the enterprise. In an earlier section of this chapter there was suggested the adoption of a set of three accounts for each store—"Sales," "Cost of Goods Sold," and "Expenses." Here the condensation has been carried still further, with all details of revenue and expense in a given store carried into a single account. The balance of such an account will naturally represent the operating profit or loss of the store concerned, but a subsidiary record must be looked to for any detail that is required.

The form which this subsidiary record will take depends on the nature of the business and in part on the character of the other bookkeeping records. The operating subaccounts may be carried in an ordinary ledger and handled like any other accounts. There is no objection to this other than the amount of clerical work required. It is often possible, however, to design a special form of ledger sheet which will save space and also take less time to post and balance.

In an enterprise large enough to justify development of the general ledger to the extent mentioned, it will ordinarily be the practice to summarize all data from the journals for an entire accounting period before any ledger entries are made. This being the case, there will be not more than one entry from each journal in any account for a single period. The subsidiary record of operations, therefore, can be condensed, and need only provide for convenient posting of these summarized entries and for combining them to show the net effect on each income and expense classification.

It may be possible to provide a sheet which will afford a means of collecting and giving effect to the bookkeeping entries and at the same time present a statement of results which can be used without further modification for report purposes. Such a form is illustrated in Fig. 45. Again, a very simple analysis sheet may be utilized, showing merely the several profit and loss items and providing for their accumulation by months for the entire year. This form may also be used for report purposes; an illustration is given in Fig. 46. Similar means may be adopted for handling operations of the warehouse, manufacturing, building, and administrative departments.

One of the principal advantages of the method of arrangement here discussed is that through the control accounts suggested there is made available a single figure representing the total of each group of assets, liabilities, etc. Where all accounts are grouped by stores (the method referred to on pages 165 to 167) it is impossible to determine, for example, the total cash of the business except by adding the balances of a number of accounts scattered through the ledger. Where all cash accounts are made subsidiary to a single control, the total cash is represented by the balance of the control account. Even where for a given asset a separate account is carried for each store (as recommended above in the case of merchandise), the aggregate value for the business

BLANK STORES COMPANY

STORE OPERATIONS ACCOUNT AND REPORT

STORE No. ________

Period Ending ________

		Cash Disbursements	Cash Receipts	Merchandise from Whse.	Merchandise from Factory	Oper. Suppl. from Whse.	Mdse. Lost and Damaged	Merchandise Transferred	Inventory Adjustments	Voucher Register	General Journal	Totals	Net
Sales-Net	Dr.												
	Cr.												
Cost of Sales	Dr.												
	Cr.												
Gross Profit	x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	
Expenses	x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	
Wages	Dr.												
Rent	Dr.												
Light & Power	Dr.												
Wrappings	Dr.												
Other Supplies	Dr.												
Repairs	Dr.												
Insurance & Taxes	Dr.												
Depreciation	Dr.												
Mdse Loss	Dr.												
Miscellaneous	Dr.												
Total Expenses	x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	
Profit for Month	x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	
Previous Total	x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	
Total to Date	x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	x x	

FIG. 45.—Store Operations Account and Report (Monthly).

This form will serve as a subsidiary ledger sheet for the operations of a single retail store for one month. Debit and credit postings to this sheet will be made in the vertical column provided for each journal, and on the horizontal line indicated for each subsidiary account. The total debits and credits will be carried over into the column provided for them at the right-hand side, and the net amount of sales, cost of sales, gross profit, total expenses, and net profit will be extended into the last column on the right. By adding to the profit for the month the total profit for previous months of the fiscal year, the total profit for the year to date will be secured. This should agree with the balance shown by the "Store Operations Control" account listed as item 15 in the account classification

BLANK STORES COMPANY

STORE OPERATIONS ACCOUNT AND REPORT
(MONTHLY AND CUMULATIVE)

Store No.____________ Year________

Month	Sales	Cost of Sales	Gross Profit	Operating Expenses											Net Profit
				Wages	Rent	Light & Power	Wrappings	Other Supplies	Repairs	Ins. & Taxes	Depreciation	Mdse Loss	Miscellaneous	Total	
January															
February															
Total to Date															
March															
Total to Date															
April															
Total to Date															
May															
Total to Date															
June															
Total to Date															
July															
Total to Date															
August															
Total to Date															
September															
Total to Date															
October															
Total to Date															
November															
Total to Date															
December															
Total for Year															

FIG. 46.—Store Operations Account and Report (Cumulative).

This form will serve as a subsidiary ledger account sheet and also as a cumulative report of operations. Postings from the various journals will have to be summarized and condensed into one figure before entry on this sheet. After the entries for each month have been made, the total for the year to date will be carried down. The net profit figure for the year to date in every case should agree with the "Store Operations Control" account.

as a whole is more easily determined because the accounts appear in order in the ledger, instead of requiring to be picked out and assembled from a trial balance which may occupy several pages.

Another obvious advantage of the arrangement is the assistance it gives in the preparation of financial statements and reports. The asset and liability items appear in the order of their arrangement in the ordinary balance sheet, and are followed by the operating accounts which form the basis for the profit and loss account or income statement. Moreover, as previously suggested, the statements themselves may be utilized as the actual detailed bookkeeping records in addition to serving as reports.

The objection to universal adoption of the arrangement is the somewhat elaborate set of records required. For a large chain these probably are no more complicated than would be necessary in any event, but for the small chain with a limited amount of clerical help the grouping by stores (and other operating units) may facilitate posting and routine handling of the ledger. In some cases it is possible to work out a combination of the two methods which will give some of the advantages of each. The important point is the adoption and strict adherence to some definite arrangement of the accounts which will facilitate the three principal kinds of work involving the ledger—posting and other routine bookkeeping work, furnishing information promptly on vital points, and preparation of periodic financial statements and reports.

CHAPTER XIII

CLOSING THE BOOKS

Frequent reference has been made to the preparation of periodic statements setting forth the results of operations. From the historical standpoint, at least, the periodic statement is the ultimate aim of all the accounting work. In laying out the books of account, record forms, and general procedure, the accountant has this end in view—the eventual presentation of an accurate, intelligible report of what has transpired in the business during a given period.

The character of such reports, and the manner in which they may be amplified and rendered more valuable by the addition of various kinds of statistical information, are indicated in subsequent chapters. Before the discussion reaches that point, however, there remain to be noted certain mechanical problems in the handling of the bookkeeping records which have to do with summarizing the operating data, adjusting it for previously unrecognized factors and influences, and making a permanent record in ledgers and journals which will substantiate the periodic statements. These operations, roughly grouped under the term "closing the books," form an important feature of the bookkeeping work, and require not only knowledge of the accounting technique involved, but a high degree of intelligence and care.

The necessity for a periodic "closing," or adjustment and summary of results for a given period, will be made apparent by a brief consideration of the nature of business operations. Obviously, it is only by periods of some sort that the profits or losses of a retail business can be gaged. The result of an individual sale transaction, even if known with exactness, forms no basis for judging the result of operations as a whole; transactions must be considered in the aggregate for a day, a week, a month, or some similar period of time. Obviously, also, these results will not be revealed by the ordinary day-to-day transactions as they are customarily recorded. Goods are bought by the ton and sold by the pound, and no estimate of profit can be arrived at from

the cost of a ton and the cash received from sale of an unknown number of pounds. Expenses of certain kinds are paid for a year in advance; accrued expenses of other kinds are a year or more in arrears. A single week or month cannot be made to bear a year's expenses because they happen to be paid within that particular week or month.

Periodically, then, there must be a day of reckoning, when every factor in the business is weighed and duly apportioned between the current week or month and other weeks or months affected, and when the total cost or expense or outgo of the business is determined and compared with the corresponding total sales or revenue or income. When this has been done, and not before, will it be possible to get a true picture of what has occurred during the period under review.

The problems of ascertaining cost of goods sold and distribution of ordinary expenses by periods have already been considered at length. The bookkeeping procedure in connection with recording such matters has, however, received no particular attention. Just what the general ledger book keeper must do in adjusting accounts and closing the books deserves some further amplification at this point.

Choice of the Accounting Period.—The first question which arises in connection with periodic closings is the choice of the accounting period to be used as a base. In reality, this is usually a choice of several accounting periods, the shorter ones being subdivisions of longer ones. Some factors in the business may be measured by days, while some can hardly be determined with accuracy for periods of less than a year. In general, the effort will be to obtain figures on most phases of the business for short periods and then to combine these short periods into ones of somewhat greater length for purposes of reviewing the results of operations as a whole. These latter periods must be brief enough to afford frequent reports on the progress of the enterprise, but not so brief as to occasion excessive clerical labor or involve so many estimates and guesses that the results are not truly significant.

To illustrate this concretely, it may be assumed that the gross sales of retail stores will be reported daily and watched constantly for important tendencies or fluctuations. Some store expenses can be determined with reasonable accuracy as often as once a week; others may better be calculated on a monthly basis. Esti-

mates of cost of goods sold and gross profit earned may be made monthly, even when actual physical inventories and their attendant adjustments are made not oftener than every two or three months, or perhaps only once or twice a year. General operating expenses, fixed charges, and the like may not be susceptible of accurate determination for periods of much less than a year, but they can be closely approximated and apportioned to shorter periods without risk of serious error.

Broadly speaking, then, the accounting periods used might be measured off along the following lines. The business week might serve as a base for purposes of reporting sales, and possibly also purchases, or goods received. A profit and loss statement, perhaps partly estimated but with actual sales and actual store expenses, might be drawn up once a month. A corrected profit and loss statement, with effect given to physical inventory adjustments, could be prepared quarterly, and later summarized for an entire year.

Such a set of reports would serve to keep the management in close touch with the most important features of the concern's affairs. Their preparation will involve no more clerical work than is fully justified by the results. The difficulty of taking physical inventories may affect somewhat the frequency of corrected profit and loss statements, but, in general, a chain store enterprise can hardly afford to get along with less information than will be made available by reports drawn up according to the program indicated.

The peculiarities of the calendar under which most of the world labors along introduce another complexity into the situation. The natural basic period in the case of retail stores is the week. From the historical standpoint one week is more like another than one day, one month, or any other calendar period. This is because the buying habits of the community are ordinarily adjusted to a weekly basis and vary accordingly, without particular regard for other time divisions.

Unfortunately, however, neither the month nor the year can be divided into a certain number of complete weeks. Thus, if it is desired to use one of the latter time divisions for any purpose, it cannot be made to consist of a combination of week-units. Either the week-units must be disregarded in preparing a monthly report, or the month must be abandoned for a four- or five-week period. Requirements of the income tax and other laws make

the use of the calendar year as an accounting period almost obligatory, and this again entails conflict with the weekly basis and adjustment for an odd day or two at the year end.

The result of this circumstance is the adoption of one of two courses, neither wholly satisfactory. If the week is adopted as the basic unit, the next larger period will usually be either a four-week period (thirteen to the year), or a thirteen-week quarter-year, which latter may, in turn, consist of one five-week and two four-week periods. If the calendar month or three-month period is adopted as basic, the week will be discarded as an accounting unit, except possibly for sales reports and collateral estimates and statistics.

The advantages and disadvantages of each basis will be readily apparent. Where the week is used, an excellent unit for comparisons is obtained and many important items normally paid weekly (like store wages) can be handled without reapportionment. On the other hand, division of monthly items (like rent) into week-units is often a good deal of a nuisance, and four-week periods which do not correspond with the calendar months tend to lose their identity and to be more confusing than helpful. The use of the thirteen-week quarter eliminates certain of these objections and may be very satisfactory where no monthly recapitulation is deemed necessary. The month unit is convenient from the standpoint of many portions of the general bookkeeping work and will undoubtedly be used where no smaller time division is employed for report purposes.

While it has been intimated in the above that the period adopted for report and statement purposes will be identical with that used in closing the books, there may be important variations from such procedure. It should be, and generally is, perfectly possible to draw off a statistical or financial report for a given period without making any corresponding entries in the ledger accounts or disturbing them in any way. Obviously, the ledger accounts must furnish the data for any formal and accurate statements, but the compilation of a profit and loss statement for the management does not necessarily involve the so-called "closing" of the books at the same time. A statement may be made up monthly, or even weekly, while the ledger "Profit and Loss" account may not be closed until the end of the year.

Nature of Periodic Closings.—Before further examination into this phase of the problem it is proper to consider what bookkeep-

ing is involved in connection with periodic closings. These are, in reality, of two kinds. The first consists of completing and summarizing all journal entries for the period, balancing the journals (*i.e.*, proving that the sum of the debit totals is equal to the sum of the credit totals), posting all the journal debit and credit amounts to the proper ledger accounts, determining the balance in each ledger account, and taking a "trial balance" or list of all ledger account balances, in which, of course, the aggregate debit balances must equal the aggregate credit balances.

This is purely routine bookkeeping work, carried out for the purpose of classifying and formally recording the transactions of the period. There may or may not be involved an adjustment of merchandise and expense accounts for inventories and prepaid expenses, but in any case there are left open on the books all the income and expense accounts of the period as well as those representing unmixed assets and liabilities.

The second or "final" closing consists of assembling in one ledger account (termed "Profit and Loss") all income and expense account balances, after the latter have been adjusted to the correct amounts. This may be understood to include also the ultimate transfer of the profit and loss balance to the account of the owner or owners of the concern, leaving only asset and liability accounts open on the books.

The calendar month, or something closely approaching it in length, is almost invariably used as the base for the bookkeeping routine of closing the journals, posting the accounts, and taking a trial balance of the ledger. A longer period would involve too much delay in getting the figures onto the books of final entry, while a shorter period would entail excessive clerical labor. Obviously, it will be a great advantage if this period can be made to coincide with one for which reports are rendered, although this is not always practical and may not be essential.

The character of the entries made in the ledgers at the end of such a period have been indicated in the concluding paragraphs of preceding chapters of this book. In general, the entries represent summaries and recapitulations of the transactions of the period, as recorded in the various journals. Care is, of course, taken to write into the journals all data affecting the period before they are closed, even though the information is not obtained until after the last day of the month. For example, an effort will be made to enter in the voucher record all invoices covering goods

received during the period, although the invoices may not all come in for as much as a week or ten days after the closing date. Similarly, adjustments will be made for physical inventories (and occasionally for estimated inventories also) as of the date when the inventory was taken, regardless of the date when the final figures are secured.

The amount of adjustment of income and expense accounts which takes place in connection with the routine month-end bookkeeping work above referred to depends in part on the methods in force and in part on the use which is to be made of the figures. In Chap. VI and again in Chap. IX it was shown that the normal process of recording expenditures for merchandise, supplies, and services produces certain "mixed" accounts in the ledger, containing both an asset element and an expense element. Before a statement can be prepared, these elements must be separated. This may be done by book entries—the character of those entries is explained in the two chapters just mentioned—or it may be done outside the books solely for interim statement purposes.

Where merchandise and prepaid expense accounts are kept by what has been termed on page 123 the "perpetual inventory" method, it is ordinarily the practice to separate asset and expense elements prior to each monthly closing. Where the other method—involving creation of temporary accounts for the periodic expression of inventory value—is followed, it is likely that the somewhat cumbersome adjustments will be made less frequently in the ledger, even though their amounts are calculated and utilized for managerial reports.

Determining the Result of Operations.—In any event, completion of the journal entries for the period, posting them to the ledger accounts, and taking a trial balance of the latter finally produces a list of classified amounts from which can be determined the result of operations for the period and the financial position of the concern at its close. Adjustment of some of the amounts may or may not be required for such determination, but the basis has been supplied for finding the answer to that all-important question: "What profit did the business make?"

The amount of this profit is, of course, the difference between the total income and the total expense for the period. When it is desired to give this net profit formal recognition in the accounts, all the income and expense balances are transferred (by

BLANK STORES COMPANY
TRIAL BALANCE WORK SHEET
(Six-column Form-Expanded)
Date 5/31/23

Name of Account	Acct. No.	Ledger Trial Balance		Balance Sheet		Profit & Loss-Total to Date		Profit & Loss-End Last Mo.		Difference-P. & L. This Mo.	
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash in Bank		460 27		460 27							
Cash on Hand		100 00		100 00							
Merchandise Inventory		2,439 18		2,439 18							
Supplies on Hand		122 40		122 40							
Prepaid Expenses		57 65		57 65							
Store Fixtures & Equipment		892 06		892 06							
Reserve for Depreciation			217 40		217 40						
Accounts Payable			672 11		672 11						
Notes Payable			300 00		300 00						
Accrued Expenses			137 55		137 55						
Capital Stock			2,000 00		2,000 00						
Surplus			326 52		326 52						
Sales of Merchandise			10,937 74				10,937 74		8,503 88		2,433 86
Cost of Goods Sold		8,317 60				8,317 60		6,430 29		1,887 31	
Store Wages		1,147 60				1,147 60		905 40		242 20	
Rent		350 00				350 00		280 00		70 00	
Wrapping Paper, Twine, etc.		93 04				93 04		51 11		41 93	
Repairs and Misc. Supplies		317 12				317 12		280 42		36 70	
Other Expenses		294 40				294 40		253 10		41 30	
Profit and Loss					417 98	417 98		303 56		114 42	
Totals		14,591 32	14,591 32	4,071 56	4,071 56	10,937 74	10,937 74	8,503 88	8,503 88	2,433 86	2,433 86

Fig. 47.—Six-column Work Sheet—Expanded.

This form illustrates a trial balance work sheet of what is ordinarily called the "six-column" form. As described in the text, the ledger trial balance is taken in the first two money columns and subsequently distributed as between balance sheet items and profit and loss items in the next four columns to the right. The last four columns on the right serve as a supplement to the original six columns and are used to bring out the profit and loss for the current month. The current figures are arrived at by subtracting the profit and loss totals at the end of the preceding month from the cumulative total at the end of the current month, as shown by the illustrative figures inserted in the form.

BLANK STORES COMPANY
TRIAL BALANCE WORK SHEET
(Ten-column Form)
Date 5-31-23

Name of Account	Acct. No.	Ledger Trial Balance		Adjustments		Corrected Trial Balance		Balance Sheet		Profit & Loss-to Date	
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash in Bank		460 27				460 27		460 27			
Cash on Hand		100 00				100 00		100 00			
Merchandise		10,756 78			8317 60	2,439 18		2,439 18			
Supplies on Hand		282 43			160 03	122 40		122 40			
Prepaid Expenses		57 65				57 65		57 65			
Store Fixtures and Equipment		892 06				892 06		892 06			
Reserve for Depreciation			217 40				217 40		217 40		
Accounts Payable			672 11				672 11		672 11		
Notes Payable			300 00				300 00		300 00		
Accrued Expenses					85 35 52 20		137 55		137 55		
Capital Stock			2,000 00				2,000 00		2,000 00		
Surplus			326 52				326 52		326 52		
Sales of Merchandise			10,937 74				10,937 74				10,937 74
Cost of Goods Sold				8,317 60		8,317 60				8,317 60	
Store Wages		1,095 40		52 20		1,147 60				1,147 60	
Rent		350 00				350 00				350 00	
Wrapping Paper Twine etc		93 04				93 04				93 04	
Repairs and Misc Supplies		157 09		160 03		317 12				317 12	
Other Expenses		209 05		85 35		294 40				294 40	
Profit and Loss									417 98	417 98	
Totals		14,453 77	14,453 77	8,615 18	8,615 18	14,591 32	14,591 32	4,071 56	4,071 56	10,937 74	10,937 74

FIG. 48.—Ten-column Work Sheet.

This form illustrates a trial balance work sheet of what is known as the "ten-column" form. It is used where the trial balance requires some additional adjustments after it has been copied from the ledger into the first two money columns. These adjustments, entered in the next two money columns, have the effect of journal entries, each debit having a corresponding credit. When all adjustments have been entered, the corrected trial balance is carried over into the fifth and sixth money columns; it is then distributed as between balance sheet and profit and loss items in the remaining columns at the right. The profit and loss figures will be cumulative totals of the year to date. The figures for the current month might be found by expanding this form with two more sets of debit and credit columns, as was shown in Fig. 47.

a "closing" journal entry) to the profit and loss summary account. It is evident, however, that this is not essential to determination of the amount, which may be arrived at from the trial balance.

The use of the trial balance for this purpose is illustrated in Figs. 47 and 48. In Fig. 47 is shown what is usually called a "six-column work sheet" for analyzing the trial balance. It is used when, as indicated in the illustrative figures, the "mixed" accounts have all been adjusted prior to taking the trial balance. The amounts under asset and liability captions are thus understood to represent pure assets and liabilities, while the amounts under income and expense captions represent the adjusted and corrected balances of all the profit and loss elements of the business.

It is apparent that with such figures to handle there remains no task except the separation of assets and liabilities from the profit and loss items. This is accomplished by setting aside two columns for each group and entering the balance of every account in the appropriate column. When completed, the two sets of columns represent a divided trial balance, from which is readily found the amount of profit or loss for the period. This amount is simply the difference, or "balance," between the two columns of each set and is usually written in as a final item to set out the amount clearly and bring the column totals into agreement.

When the "mixed" accounts have not been adjusted prior to posting the journal entries, something more than this simple work sheet is obviously required. If the separation of asset and expense elements has not been accomplished in the ledger, it must be accomplished on the work sheet. The latter is, therefore, expanded by two additional sets of two columns each, making ten columns in all, as illustrated in Fig. 48.

When the trial balance of the ledger has been copied in the first two columns, the accounts are examined to determine which ones require adjustment before a profit and loss figure can be arrived at. In the illustrative figures given as an example, the number of adjustments has been limited to avoid confusion, but it is proper to note that there may be many others and that detailed examination of all asset and liability items is necessary for ascertainment of the corrections required. This phase of the problem is considered in greater detail in Chap. XIV, where the "balance sheet" or asset and liability statement is discussed.

The adjustments and corrections found to be required are entered in the two columns provided exactly as though they were additional journal entries. Each involves both a debit and a credit, which are, naturally, of equal amount. These may be to record new and hitherto unrecognized assets or liabilities, or they may be simply transfers of one of the two elements from a "mixed" account to an appropriate account of "unmixed" character. In general, their purpose is to translate the partial and incomplete record embodied in the unadjusted ledger figures into a complete and intelligible history of events and conditions.

When all these adjustments are set out on the sheet, each is applied in increase or reduction of the trial balance amounts (according to its nature) and a new or adjusted trial balance is brought forward in the third set of columns. This trial balance represents what would appear in the ledger accounts if all the adjustments had been made as actual journal entries and formally posted in the accounts. It is, in fact, the same sort of a trial balance as was abstracted from the ledger in the first two columns of Fig. 47. With this trial balance obtained, it is again a simple matter to separate asset and liability items from profit and loss items in the two remaining sets of columns, just as illustrated in both Figs. 47 and 48.

Results for Cumulative Periods.—In the discussion above it has been stated that on completion of the procedure outlined the profit and loss columns of the work sheet will give the result of operations *for the period.* This is strictly true, provided a final closing is made at the end of each period. In such case all the income and expense accounts are "closed" into the "Profit and Loss" summary account and are thus cleared of all past history at the beginning of each new period. Often, however, this final closing is not formally made on the ledger. In that event the income and expense totals of one period are carried forward and cumulated with those of the following months. The balances in the accounts therefore represent the aggregate income and expense for all periods to date. The final difference or "balance" between the "Profit and Loss" columns on the work sheet will then represent the aggregate profit or loss of the business for the entire time since the last "final closing" of the ledger accounts was made.

Since it is in many cases found desirable to make a "final closing" not oftener than once a year, this situation may be met

with 11 months out of 12. It presents no particular difficulty. By the addition of two more sets of two columns each, the work sheet is provided with space wherein the results for the current month can be separated from those of previous periods. For example, at the end of May when the corrected profit and loss figures for the period from the beginning of the year to May 31 have been arrived at, the corresponding figures from the work sheet of April 30 are entered in the adjacent columns and subtracted from the May totals. The differences are extended into the last two columns and are, of course, representative of results for the month of May. This method has the added advantage of automatically giving effect to all adjustments, since the trial balance of each month is corrected before being analyzed. An illustration of the procedure is given in Fig. 47, where the basic "six-column work sheet" has been expanded to show both the monthly and the cumulative results.

The work sheets illustrated and described are to be understood as representing a point of departure in trial balance analysis rather than a final and rigid form suited to all occasions and circumstances. The individual accountant will make his own modifications in the methods suggested. It is apparent that with the adjustment columns utilized extensively the book trial balance can be corrected in any manner that may be necessary to a proper showing of the results. It is even possible to bring a trial balance as of one date forward to a later date solely by the use of work sheet adjustment columns, though this involves so much calculation and recapitulation as seldom to be considered practical.

The purpose of the trial balance analysis, as accomplished through a columnar work sheet, is to render available the details of operating results and financial position, and in a measure to prove the accuracy of the bookkeeping work. With the figures set forth in the manner illustrated, the preparation of a report becomes a simple matter. Obviously, however, a skilled and careful accountant may avail himself of short-cuts in drawing up such reports when he has sufficient familiarity with and confidence in the figures he is handling. Where the ledger, for example, contains numerous control accounts, it may be unnecessary to list the supporting detail balances on a work sheet; often they can be carried direct into the formal report and proved after being listed there. Naturally, duplication of work is to be

avoided like a plague, and no figure is to be written down twice if once is sufficient. The use of reports as supporting data for ledger accounts is further considered in a later chapter.

So far as the routine of month-end bookkeeping and trial balance analysis are concerned, the chain store enterprise differs little from any ordinary business. In the work sheet illustrations given (Figs. 47 and 48) the operating accounts shown are those of a single retail store. This is for the sake of simplicity; the type of accounts in the trial balance will not differ in a concern which comprises a number of stores, but there will be a corresponding set of operating accounts for each store, with possibly some condensation through controls of the sort discussed in Chap. XII. Conceivably, a multi-columnar sheet might be used for the analysis and a separate set of columns given to the profit and loss account of each store, but this is generally a superfluous refinement.

When a final closing of the profit and loss accounts is effected, however, the procedure has some distinctive features deserving of attention. The most common types of commercial enterprise involve a single activity of a definite sort, and have, accordingly, a single set of income and expense items resulting in a single profit or loss figure. The chain of stores, however, is concerned with a number of activities, of similar nature but largely independent of each other, each sustaining an operating profit or loss of its own which can be pretty definitely measured. In consequence, the accountant is concerned first with the operating results of each store as a semi-independent unit, and then with the combined result of operating the chain as a whole.

Profit and Loss Summary Accounts.—In so far as the ledger is concerned, the results of operation are expressed by transferring to a summary account the various income and expense items, and from this account determining the balance of net profit or loss. It would be possible to consolidate all the profit and loss items of all the stores into a single summary account; there might be a certain economy of bookkeeping effort in such procedure. The final figures, however, on such an important point as the operating results of an entire year, for example, are entitled to a more detailed and formal presentation in the books of account. Here is a matter of history which may be of interest a quarter of a century from today, when less permanent records have been lost or destroyed. There can be little excuse for failing to set down

BLANK STORES COMPANY

GENERAL LEDGER

Name of Account Profit & Loss — Store # 7 Account No. 7-M.

Date	Particulars	P.R.	Debit Amount	Date	Particulars	P.R.	Credit Amount
12/31/23	Cost of Goods Sold	J-47	27419 78	12/31/23	Sales	J47	34523 17
	Store Expense —Wages	"	3428 50				
	" " — Rent	"	600 00				
	" " — Light - Power	"	67 27				
	" " — Supplies	"	182 40				
	" " — Repairs	"	179 63				
	" " — Insur. + Taxes	"	57 04				
	" " — Depreciation	"	297 10				
	Profit (to Gen'l P+L Summary)	J-51	2291 45				
			34523 17				34523 17

Fig. 49.—Store Profit and Loss Summary Account.

In the general ledger account sheet form illustrated above have been inserted figures and descriptive captions to indicate the appearance of one of the store profit and loss summary accounts after the annual closing entries have been made. The items represent balances transferred from various operating accounts of this particular store, the reference being to the transfer or closing entry. The final entry on the left-hand side represents the transfer of the profit balance from operations of this store to the "General Profit and Loss Summary" account illustrated in Fig. 50.

all the particulars plainly and intelligibly, and so classified as to show at a glance the contribution of each unit in the enterprise to the aggregate profit or loss.

Properly, then, the final closing will consist, first, of transferring the income and expense totals of each store (or other unit) to the individual profit and loss summary for that unit. This summary will be an ordinary ledger account, but utilized only at the time of a final closing. The character of the entries appearing in it have, for subsidiary activities of the business, already been indicated in the text of Chap. X. The appearance of such an account for a store unit is even more concretely indicated in Fig. 49. In this illustration it has been assumed that there is a separate general ledger account for each income and expense factor, and each, therefore, appears, individually in the summary. This has great advantages. The record is complete in this one sheet, and no reference to other records is required to complete the story.

When the profit and loss summaries of all the units have been duly posted, there is the remaining step of combining the results in a single general summary account. This will contain, as shown in Fig. 50, the operating profit or loss balance of each store (transferred from its summary), the profit or loss of each subsidiary or collateral department (transferred from its summary), and also those general and undistributed items which apply to the business as a whole and not directly to any of its units. The balance of such an account will represent the profit or loss of the business as a whole.

How often should this final closing actually be made in the books of account? It has been shown that it is by no means necessary for the preparation of periodic statements, which can be drawn up from memoranda appearing outside of the ledger. There seems to be no basis for the somewhat general impression that it is necessary to close the "Profit and Loss" account every time an operating report is prepared. On the other hand, there are frequently good reasons for not doing so.

One of these is the volume of clerical work involved. The preparation and posting of the closing journal entries alone is, for even a small chain, no inconsiderable task when attempted as often as once a month. Moreover, the accounts themselves become overcrowded and confused when loaded down with fre-

BLANK STORES COMPANY
GENERAL LEDGER

Name of Account General Profit & Loss Summary Account No. 15-N

Date	Particulars	P.R.	Debit Amount	Date	Particulars	P.R.	Credit Amount
12/31/23	Loss - Store #4	J-52	110 17	12/31/23	Profit - Store #1	J-51	8666 10
	" - " 5	"	360 05		" - " 2	"	10030 46
	" - " 8	"	1040 54		" - " 3	"	4790 22
	General Selling Expense	J-54	8643 19		" - " 6	"	11366 11
	General Admin. Expense	"	17203 42		" - " 7	"	2291 45
	Net Profit (to Surplus)		10847 95		" - " 9	"	311 05
					" - " 10	"	529 16
					Profit Manufacturing Dep't	J-53	220 77
			38205 32				38205 32

FIG. 50.—General Profit and Loss Summary Account.

In this form is illustrated the probable appearance of the "General Profit and Loss Summary" account of a chain store enterprise after the final closing entries for year have been made. The items designated as store profits or losses represent amounts transferred from accounts similar to that illustrated in Fig. 49. The other items are the balances of those income and expense accounts not directly related to the operations of any individual store. The final item on the left-hand side of this account represents the balance transferred to the corporation surplus account, or to the capital accounts of the owner or partners.

quent closing entries, and the profit and loss summaries lose their significance when they cover only a short period.

Again, while the preparation of statements as often as once a month is almost imperative, it is obvious that these will sometimes suffer from the inaccuracies of hasty compilation and insufficient historical perspective. Such inaccuracies may be unimportant as compared with the necessity of prompt and approximately correct information on the happenings of the period, but in the formal expression of the results in a ledger account it is desirable that every precaution be taken to eliminate errors and present a history which is the result of deliberate and painstaking consideration of all the circumstances.

The Annual Closing.—Such searching inquiry into every factor of the business and careful adjustment of every item can scarcely be attempted more than once a year. Month by month, or even week by week, an intelligent estimate of operating results will be made. Most of the important factors are definitely known or can be closely approximated by settled methods. Given care and intelligence, the monthly or weekly statement may be made as accurate as any reasonable requirement could demand. There are always, however, the obscure factors, the odds and ends of unadjusted transactions, the miscellaneous accumulation of debatable questions, which should properly be swept away before a formal profit and loss closing. Rarely does the chief accountant of an enterprise find time more than once a year for such work. Every set of accounts requires a sort of annual house-cleaning, which may well be coincident with closing out all the old profit and loss balances and starting afresh on a new year.

Another point is entitled to consideration also. However much is made of the fact that statements promptly prepared for short operating periods are a necessity for intelligent management, it is not to be forgotten that a review of operations for longer periods may be equally informative. The mental habits of most business men involve a sort of annual casting up of accounts, no matter to what extent they interest themselves in the results over lesser periods of time. Perhaps the best founded objection to closing out the profit and loss accounts every month, or even every quarter-year, is the difficulty under such a method of getting from the ledger a satisfactory history of the year as a whole. Not only are the various income and

expense accounts broken up into four or a dozen pieces, instead of presenting clearly the totals for the entire year, but there is usually a string of interperiod adjustments and counteradjustments which must be first taken in and then left out, and offset against one another, to the entanglement and exasperation of anyone who tries to weld the disconnected parts into an intelligible whole. The preparation of an annual income tax return from a ledger the profit and loss account of which has been closed monthly involves a ridiculously excessive amount of clerical labor.

The purposes of closing the accounts, at any date, may be said to be three. First is the accomplishment of a periodic housecleaning of the sort above mentiond; a general adjustment of accumulated inaccuracies and discrepancies, putting everything on a proper basis for a fresh start. Second is the clearing from the accounts of the aggregation of revenues and expenses which after a time reach such an extent as to become meaningless, and the commencement of a new period of convenient length. Third is the formal expression in permanent form of the amount and character of earnings or losses over a period, and the corresponding increase or decrease in the investment of the owners in the business. The end of a year generally furnishes the most suitable time for accomplishing each of these purposes.

It may well be noted here that the term "year" does not necessarily mean the calendar year alone. A 12-month period ending with any month may be adopted, and some other month than December may easily be found the most suitable. The natural date for closing accounts is that on which the stocks of goods are at their minimum (to facilitate inventory taking), volume of business is at its lowest ebb (so that employees have more time to assist in getting records complete, work up-to-date, etc.), and the accounting department is least cumbered with routine operations (so that the maximum attention can be given to prompt handling of closing entry data). Each enterprise should adopt its own fiscal year, based on considerations of the sort just mentioned and not on accidents of the calendar.

Postclosing Adjustments.—It has been stated above that one important objection to frequent closing of the profit and loss account is the number of adjustments as between periods, which prove very confusing when an attempt is made to combine a number of periods. The difficulties of correcting every ledger

account to the proper figure—always present when a final closing is made—are accentuated where the attempt at an adjustment is made frequently and in haste. Mistakes are bound to occur, and while these are ordinarily not serious as far as a monthly operating statement is concerned, they prove misleading and confusing if embodied in the profit and loss summary accounts.

Accounting errors, to be sure, occur in annual closings as well as those of shorter periods. Due to the longer period, and to the generally less hurried procedure at the year-end, such errors are diminished both in number and in importance. It is evident, also, that the effect of an error on the results reported for a year will be proportionately less than the effect of an error of equal amount on the results for a shorter period.

When such an error is subsequently discovered, it is seldom of sufficient importance to justify reopening the accounts of a former period for the sake of attempting to correct the result that they show. Every student of accounting is aware that no statement of the affairs of a going concern is absolutely and unquestionably accurate. In any closing it is necessary to make certain assumptions as to values, certain approximations as to amounts, certain estimates as to the effect of given factors. The utmost of thought and care should be given to the problem, but once a result is arrived at and formally expressed in the ledger, it should be altered or disturbed only for a correction of extraordinary magnitude. The next fiscal period can almost always swallow up the item which is out of line without suffering any material distortion of its own history, and what has been set aside as accumulated profits may best be left unchanged except on discovery of an error of very serious proportions.

Transfer of Profits to Proprietorship Accounts.—When the income and expense accounts of a period have all been closed into the final "Profit and Loss" summary account, there remains one additional step to conclude the bookkeeping work and clear the ledger for the beginning of a new year. This is the transfer of the balance of the profit and loss summary to the account which represents the interest of the owners in the profits of the concern. Such an account may bear one of a number of titles, depending on the character of the ownership. The nature of the item is clear, but it may be differently expressed in different cases.

In the case of a single owner, all items affecting proprietorship are usually carried eventually to what is known as the proprietor's

"Capital" account. To such an account are credited originally such sums as the proprietor may invest in the business, and against it are charged such sums as he may withdraw. To this original capital, altered possibly by withdrawals, there are to be added the profits which accrue from operation of the business; from it are deducted any losses which occur. The balance of the proprietor's "Capital" account thus always represents his net investment in the business, rising and falling with the addition of withdrawal of cash invested, and increasing or decreasing also with the profits or losses incurred through operations.

The case of a partnership is similar. Here, when the final balance of profit or loss has been found, it will also be added to the capital accounts of owners, according to proportions set out in the partnership agreement. The division of profits between partners sometimes occasions disputes and involves problems of apportionment too complex for discussion here; from a bookkeeping standpoint, however, there is no great difficulty in transferring and distributing the profit and loss balance among the capital accounts of the various partners, once the respective proportions are determined.

Occasionally the formation of a chain concern involves pooling a number of previously independent interests, and the agreement may provide for a larger share of the profits of certain retail units going to their former owners. Wherever any such consideration is present, it is necessary to arrive at a figure representing the final net profit of each store after deduction of all charges, including general and administrative expense, which may not otherwise be apportioned to the stores. The understanding among the partners as to the basis of distributing such items must be full and complete and should be set down in writing for the guidance of the accountant. Special care must be taken in all matters pertaining to allocation of doubtful income and expense items between stores to avoid disagreements and possible legal entanglements.

If the chain enterprise is operated as a corporation, the procedure is somewhat different. Ordinarily, the original capital contributions of the stockholders are credited to a "Capital Stock" account, the amount of which remains without subsequent alteration except as additional stock is sold or the outstanding stock is bought in and retired. For recording the accumulated profits of the enterprise a separate account, known as "Undivided

Profits," or "Surplus," is carried. The profit balance of a period is transferred as a credit to this account; a loss becomes a debit against it. So long as no profits are distributed to stockholders, the account will receive no other entries. When a distribution is made, however, the total "dividend" becomes a charge against the account, reducing the amount of accumulated profits undivided.

Bookkeeping Entries.—The actual bookkeeping entries necessary to bring about a final closing of the ledger are simple enough in character, once the proper amounts to be transferred to the profit and loss summary are determined. When each asset, liability, income, and expense account has been duly examined and adjusted to take into account every factor known to bear on the phase of the business represented, the balance of each income and expense account is determined and a general ledger journal entry is formulated to transfer these balances to the profit and loss summary. The accounts enumerated in such an entry will, of course, depend on the account classification in use. There may be several entries, each dealing with one profit and loss element, but the consolidated entry will be of substantially the following effect:

Dr. Sales	$xxxx	
Cr. Sales Returns and Allowances		$xxxx
Cost of Goods Sold		xxxx
Store Operating Expenses (in detail)		xxxx
Store Profit and Loss		xxxx

Obviously, the credit to the account called "Store Profit and Loss" will be the difference between the sales revenue and the aggregate of costs, expenses, and sales deductions. Should the latter exceed the revenue item, the net amount would be a debit to the summary account.

The specimen entry above covers the operations of a single store. There will naturally be a corresponding entry for each store in the chain and the operating accounts designated will bear the number of the store concerned. Similar closing entries will be made for manufacturing, building operation, and like departments, as indicated in the closing paragraphs of Chap. X.

The succeeding step, when the results of operations have been condensed into a set of store profit and loss accounts, is the transfer of all those balances to a general summary account, which will contain also those general and undistributed items not taken up

elsewhere. In case all these balances are closed out in a single entry, its appearance will be as follows:

Dr. Profit and Loss—Store No. 1	$xxxx	
Profit and Loss—Store No. 2	xxxx	
etc.		
Profit and Loss—Manufacturing Department	xxxx	
Miscellaneous Income	xxxx	
Cr. Administrative Expenses (in detail)		$xxxx
Miscellaneous General Expense		xxxx
General Profit and Loss		xxxx

In this case also it is obvious that the amount finally transferred to the general profit and loss summary will be the difference between the aggregate departmental profits and the undistributed expenses. Where any of the accounts shows a loss instead of a profit, the balance is, of course, on the other side of the account and the form of the entry will be altered accordingly.

Contrary to the procedure in posting entries of all other kinds, it is customary (and always desirable) in making the postings to profit and loss summary accounts to enter on the ledger page not simply the final balance shown by the closing entry, but instead, all the details of the entry—what is, in fact, practically a transcript of the entry itself. In other words, the ledger account for profit and loss of store No. 1 should show not simply the net profit figure, but also the sales, cost of goods sold, and operating expense totals making up the balance. Each item should be described in the space provided, so that the account page is a complete history of the results of the period's operations. This is illustrated in Figs. 49 and 50. No matter what time may have elapsed, the single ledger page will henceforth answer all questions of importance on this subject promptly and accurately. The scant amount of time required in making up a presentable profit and loss account is well repaid in the satisfaction of easy future reference to it for the answer to the innumerable questions which always arise in connection with the history of past periods.

It is, of course, entirely possible to neglect this feature of the bookkeeping work and to enter in the profit and loss summary a single, unexplained figure representing the net balance of the closing journal entry. If such procedure is followed, there is little benefit to be derived from maintaining a separate profit and loss summary for each store. Unless the summary accounts are to serve as a permanent record, containing sufficient details to be useful for future reference, the entire final closing might almost

as well be consolidated into a single entry, with a single net profit figure the only item posted in the general summary account. There is little excuse for such a slipshod method, and it is likely to prove a false economy of effort in the long run.

The final step in the bookkeeping is the transfer of the net profit or loss to the appropriate proprietorship account. This is accomplished by an entry simply debiting the profit and loss summary account with the amount of the balance shown by it (the net profit for the period) and crediting the capital account of the owner or partners, or the corporate surplus or undivided profits account. If a loss has been sustained, the form of the entry is reversed.

With the posting of all these entries, the ledger is resolved into a simple record of assets, liabilities, and proprietorship. All income, expense, and profit and loss summary accounts are closed out, their balances transferred, combined, and finally eliminated as factors in the trial balance. There remains nothing to be done except the formal ruling off of closed accounts and carrying down the balances of the asset and liability accounts which express the financial position of the concern at the closing date. The ledger is clear of the details of past history and ready for fresh accumulation of data on the new period about to begin.

CHAPTER XIV

THE BALANCE SHEET ACCOUNTS

Throughout the foregoing chapters emphasis has been placed on the historical aspect of accounting records. The transactions taking place have been viewed from a standpoint of operating results—profits and losses realized from conduct of the business. Taken up in order, sales revenues, cost of goods sold, expenses, miscellaneous profits and losses, and the bookkeeping problems connected with each have been discussed as the important elements of chain store accounting.

There is small likelihood that these factors will be given too much weight. "What has happened?" "What is happening?"—these are the vital questions which the management asks and the accountant must answer. First in broad outlines and round sums, later in analytical detail and comparative percentages, the accounting department must furnish the story of events. How to gather the material for that story has been indicated in preceding chapters; how to tell the story remains to be studied.

It is not to be forgotten, however, that a business history consists of situations and conditions as well as events and transactions. The conduct of any business involves the acquisition of certain things of value, business assets, and the incurrence of certain obligations, business liabilities. The assets change their form and value, the liabilities their character and extent; these changes, in fact, constitute the events of the concern's history. Every event has its complement in a financial condition or situation. The status of assets and liabilities is a consideration inseparable from a determination of income and outgo.

Equality of Assets and Obligations.—It is an axiom of double-entry bookkeeping that the total debits are invariably equal to the total credits. This is merely the expression in technical terms of the inevitable equality of the assets and obligations of a business. In this matter the business is, of course, viewed impersonally, and its obligations are understood in the broad sense as including not only liabilities to creditors but also its responsi-

bility or accountability to the owner for his capital contributions and the profits accruing thereto. When it is considered that any excess of assets over liabilities represents an equity of the owner in the business, this equality of assets and obligations becomes plain. If assets minus liabilities to creditors equals ownership equity, then, obviously, assets equal liabilities to creditors plus ownership equity.

This latter form of expressing the facts of a concern's financial position—stressing the equality of assets to obligations (perhaps "accountabilities" is a more accurate term)—gives rise to a special accounting designation covering statements of assets and liability-accountabilities. Such a statement, showing this equality by its arrangement and content, is called a "balance sheet;" its two parts or sides "balance." As a natural consequence, the accounts whose balances make up this statement come to be called by accountants "balance sheet accounts." Assets and liabilities, unmixed with any expense or income element, are thus distinguished in loose terminology from those "profit and loss accounts" which have hitherto received so much attention.

The manner in which these balance sheet accounts come into existence is easily understood from an examination of the circumstances of the founding of a business enterprise. The owner invests a sum of money; the business thus acquires an asset (cash) and assumes accountability to the owner for the sum invested. Part of this cash is expended for store fixtures and other equipment; the cash balance is thus reduced and a new asset of equivalent value is acquired. Merchandise is bought on credit; another asset is acquired, and a corresponding liability is assumed. There is no element of profit or loss involved in these transactions, but they bring into existence a set of accounts making up a balance sheet. Henceforth the accountant has to deal not solely with accounts expressing historical events (sales, expenses, etc.), but also with accounts representing actual property and obligations (assets and liabilities).

Income and expense items are recorded to furnish an analysis of the profit or loss sustained in operation of the business; eventually they are summarized and closed out, resulting in a mere increase or decrease in the equity of the proprietor. Asset and liability items are set down to record *things*, existent and tangible. The balance sheet accounts do not disappear after cumulation for some arbitrary period, but continue as long as the thing itself

continues to exist. They are the realities of the situation at any given moment, where the profit and loss accounts represent the history of a past period—be it day, week, month, or year.

Obviously, the balances of these asset and liability accounts fluctuate as the extent of the various assets and liabilities itself increases or diminishes. There is a constant interplay of these factors in a going business—assets exchanged for other assets, assets surrendered in cancellation of liabilities, new assets acquired and corresponding liabilities assumed, and assets consumed in operations. In part, these exchanges involve no difference in value (as where an account receivable is converted into cash, or a liability is paid). In large measure, however, the transaction involves exchange of an asset of one value for something of greater or less worth (as in a sale of merchandise for cash), or the actual disappearance of the asset without specific remuneration to the business (as in the consumption of wrapping paper, store supplies, etc. and the wearing out of auto trucks, store equipment, and like items). It is in these latter cases that profits are realized and losses sustained; the amount of the asset sold or consumed is set off against the value of the new asset acquired by means of the various expense and income accounts which have been discussed in preceding chapters.

Verification of the Balance Sheet Items.—Measurement of the values of these assets exchanged, consumed, and acquired is the continuous problem of the accountant. Since the amount of one asset which has disappeared and the amount of another acquired in its place are both very definitely related to the amount subsequently found to be on hand, valuation of the latter amount becomes an invaluable check on the accuracy of the income and expense amounts currently recorded. Also, since practically all the assets (and some liabilities) tend to vary in value, even when unaffected by recognizable business transactions, the final verification of the items of a profit and loss account practically demands a coincident verification of all the items of the balance sheet.

A detailed balance sheet verification, as a proof of the accuracy of an operating statement, may involve a very considerable amount of clerical labor. Taking and valuing an inventory of merchandise is alone no brief task, as has been seen. If every item were examined in detail every time a report was submitted to the management, excessive and unnecessary delay

would occur. To avoid this, some sort of compromise procedure must be adopted which will assure substantial accuracy of results without unreasonable clerical work. A predetermined and definite method of handling the asset and liability accounts will assure substantial accuracy in most of them from period to period and make a detailed verification, or audit, necessary only at fairly long intervals.

It may fairly be assumed that some sort of an operating statement will be required once a month, or at the end of a four- or five-week period. This will necessitate that the asset and liability balances be adjusted to correct figures, either through actual entries in the ledger or through corrections on a trial balance work sheet (see Figs. 47 and 48). If the routine accounting procedure in effect results in automatic adjustment of these items, or most of them, work sheet corrections may be unnecessary. At least once a year, however, all the accounts will be scrutinized with extra care and journal entry corrections will be made to remove the errors and discrepancies which creep into even the most carefully managed set of records.

The problem of balance sheet regulation is, then, threefold—involving first a standard accounting procedure which will automatically adjust as many accounts as possible, second a monthly routine check, and third an annual detailed verification or audit. As the various balance sheet accounts differ in character, the treatment of each will be different. It is in order to consider here the nature of the principal items and the methods required in dealing with each.

The assets and liabilities making up the financial position of the ordinary chain enterprise may be grouped as follows:

1. Current assets:
   (*a*) Petty cash funds
   (*b*) Bank accounts
   (*c*) Accounts receivable from customers
   (*d*) Accounts receivable from others
2. Working assets:
   (*a*) Merchandise inventories
   (*b*) Operating supplies
   (*c*) Prepaid expenses
3. Fixed assets:
   (*a*) Auto trucks, wagons, etc.
   (*b*) Store and warehouse fixtures and equipment
   (*c*) Buildings

   (*d*) Land
   (*e*) Reserves for depreciation
4. Current liabilities:
   (*a*) Accounts payable to trade creditors
   (*b*) Notes payable to trade creditors
   (*c*) Accounts payable to others
   (*d*) Bank loans
   (*e*) Accrued expenses
5. Deferred liabilities:
   (*a*) Bonds and long-term notes
   (*b*) Mortgages, etc.
6. Reserves
7. Proprietorship:
   (*a*) Capital stock (or owners' capital accounts)
   (*b*) Surplus, undivided profits, etc.

Current Assets.—This list begins with the current asset accounts, of which the first two are those covering cash. Keeping and verifying the cash accounts is an important but not particularly difficult matter. Cash can be measured accurately and, because of its value and fluidity, it is almost always recorded with care as received and disbursed. The cash books will ordinarily indicate exactly the amount on hand within 24 hours after the close of a period. Verifying this amount should be the first task of the bookkeeper, monthly as well as at the year-end.

Petty cash funds have simply to be counted by some responsible person immediately following the close of business on the last day of the period; the amounts will, of course, be compared with the figures shown by the ledger accounts after the latter have been posted and balanced. Where the funds are kept on the imprest system (see page 22) and their amount is the same at all times, they need not necessarily be counted at the end of the period but may be checked up by a collector or district manager on any convenient day.

The ledger accounts covering bank balances are kept up-to-date by regularly charging them with sums deposited and crediting them with checks drawn. At the end of each month the bank will furnish on request a statement of account, showing particulars of deposits and withdrawals, together with the balance remaining on deposit. This latter figure will naturally seldom agree with the balance in the company's ledger account, owing to the fact that checks are often not passed through the bank for payment on the same day they are issued and entered in the company's cash disbursements book. If the balance shown by

the bank, however, is reduced by the total of all the checks "outstanding," the net amount should equal the ledger figure—unless, of course, there are some other causes of discrepancy. The process of determining the amount represented in outstanding checks and other differences, and thus "reconciling" the bank balances, should be carried out promptly at the close of each month. It can never be safely neglected.

The handling of accounts receivable from customers has been detailed in Chap. IV. Here, as in the case of cash, the increases and decreases in the amount collectible from each customer are promptly recorded and the balance is readily determinable at any time. To facilitate the accounting work and guard against error, there is usually maintained a master or "control" account for each set of customers, representing in total the amounts due from them and the increases and decreases in such amounts.

As the accounts due from customers are little likely to be disturbed except by error and carelessness, which the control account is designed to protect against, it is usually considered sufficient proof at the month-end simply to agree the total of the individual account balances with the control balance. This verification is, of course, supplemented by sending statements of account to all customers and requesting payment; any errors brought to light in this manner may be corrected in the following month. The only other adjustment apt to be required is the elimination of bad accounts; this may be accomplished by a critical examination of all outstanding balances at regular intervals—probably every three or four months, at least once a year.

Accounts receivable against other than customers are for the most part handled in similar fashion, except that often they are not segregated in a separate ledger and placed under a control account. The amount of verification necessary at the close of each monthly period depends on the nature of the accounts. Since they consist frequently of a miscellaneous lot of unrelated items, charged up to sundry parties for various reasons, it is evident that a close watch on them should be kept at all times to insure that the balances carried along from month to month are actually proper and collectible. This is particularly true of any large amounts; in the case of small items the acountant may not have an opportunity at the moment to investigate each of these every month but they should be fully verified at each year-end, if not more frequently.

Obviously, this brief list does not exhaust the possible kinds of current assets of which a chain enterprise may find itself possessed. Other items, however—such as liberty bonds, notes receivable, accrued income, and deposits under contracts—are of infrequent ocurrence in such concerns and hardly justify the devotion of space in this book to particulars of their treatment. Like other assets, they must be so handled that the accountant can be sure at a closing date that the amount recorded for each represents accurately the actual value of the asset to the business.

Working Assets.—Closely related to current assets are the so-called "working assets" of the concern. Such items, in fact, are often treated as current assets, along with cash, accounts receivable, etc. There is, however, an important distinction in that merchandise, supplies, and like items must go through a process of exchange or consumption before they are realized in cash, while the first-mentioned group are already converted into cash or its equivalent in collectible accounts.

Merchandise is easily the most important item of the working asset group, and the maintenance of its ledger value at the proper figure is undoubtedly the most troublesome problem of retail store accounting. The various possible methods of determining the amount of merchandise outgo and the balance on hand have been discussed at some length in Chaps. V to VIII. They comprise, as has been noted, detailed analysis of all transactions, periodic physical inventories, and various types of estimate based on sales amounts. Whatever the other methods used, the physical inventory is the only satisfactory final proof of the amount on hand. It is a valuable aid to accuracy at any time and strengthens the monthly operating statement if taken every month. This may not be practical, but in no case can the interval between physical inventories well stretch out to the full year unless there is an excellent merchandise record system in force and giving accurate results.

The customary procedure in taking and valuing physical inventories has already been outlined. There is one point of importance in the same connection, however, which has not previously been stressed. This is the relationship of the inventory to other portions of the bookkeeping work. An inventory value is accurate only as it rests exactly on the dividing line between the business of the old period and that of the new. It is not sufficient that the physical count be made after the close of business on the last

day of the old period and the commencement of operations on the first day of the new; there must, in addition, be assurance that the goods counted and valued are (from an accounting standpoint) the property of the concern at that time, and, conversely, that all goods belonging to the concern are duly counted and valued.

However it may seem to the uninitiated, this is far from a foregone conclusion. Goods bought are taken up as obligations on the books by means of entries in a purchase journal or voucher register. These entries are made from invoices, presumably the day the goods are received. Sometimes, however, confusion arises. The receiving clerk or store manager may be a day late in writing or sending in his receiving reports; goods may arrive but the invoice be missing. In such cases it is quite possible that there may be a discrepancy between the time of assumption of ownership as expressed by the purchase journal and as expressed by the physical inventory. A similar discrepancy may occur in connection with sale of the goods, though in a largely "cash and carry" business it is not apt to be important.

These precautions, then, must unfailingly be taken: to establish that liability has been taken up (through voucher record or purchase journal) for all merchandise included in the inventory, or sold prior to the inventory; to establish that all merchandise for which liability has been taken up is included in the inventory, unless sold prior thereto; and to establish that no merchandise included in the inventory has already been sold and taken up as a cash or charge sale, regardless of whether it has been delivered or not. If any exception to these rules is discovered, either the inventory must be adjusted or the liability to trade creditors increased or reduced by the proper amount. Unless that is done the most exact inventory of goods on hand may become altogether misleading in relation to an operating statement or a balance sheet.

The treatment of the other working asset items has been given some attention in preceding chapters. They consist of the unconsumed or unexpired portions of those operating materials or services which are paid for in advance of the period or periods when they are to be utilized. As the periods they are to cover can in most cases be determined at the time payment is made, the most satisfactory disposition of the items is an advance distribution of the charge by periods, a given portion to be written off each

month. If this advance distribution is made with accuracy, nothing further is required. Customarily, the amounts remaining set up as prepaid expenses are verified occasionally by a rough check of some sort to guard against clerical errors. In the case of operating supplies it may be necessary to take an occasional physical inventory, though this is ordinarily done only at the end of the fiscal year.

Fixed Assets.—When attention is directed to the permanent equipment of the enterprise—the so-called "fixed assets"—it is found that the problem is a very different one. Here are certain items of property which are not shortly to be converted into cash, not to be exchanged for cash through sale in the ordinary course of business, not even to be quickly consumed in operation of the business. While inevitably wearing out or becoming obsolete in the course of time, their useful life may easily extend over many years. It may go on indefinitely. Yet there is no question but that an old auto truck is worth less than a new one, that a shabby show case may have to be replaced by one more attractive and serviceable. The invisible element of depreciation must in some way be recognized and measured if the valuation of the permanent equipment of the business is to be kept on a sound basis.

The conventional method of providing for depreciation may be briefly described as follows. The length of the useful life of each class of permanent property is estimated in advance and in each accounting period a proportionate part of the total amount invested in such property is "written off" as a charge against the profit and loss account. This process of writing off consists usually of formulating an entry charging an operating expense account (known as "depreciation") and setting up a corresponding credit which operates to reduce the value assigned to the fixed assets affected.

If this latter end were accomplished by crediting the depreciation allowance directly to the asset account, there would be no difference between this procedure and that employed in handling prepaid expenses, which was described in an earlier chapter. For various reasons, however, it is usually found desirable to carry the credits in a separate account, ordinarily termed a "reserve for depreciation." In most cases each fixed asset account will have a corresponding reserve account, and the reserve balance will be deducted from the asset balance to show the net or depreciated value of the property.

If it were possible to determine in advance the exact number of periods during which each piece of property will remain useful, depreciation allowances could be computed with absolute accuracy and each item would be completely charged off at the moment it was retired from service. In practice, of course, anything like accuracy in depreciation calculations is impossible, and the amounts charged off are simply approximations based on past experience and anticipated future conditions. This fact has led many accountants into careless and slipshod methods of dealing with the problem, whereas the very impossibility of a close check on the values of the assets makes the more imperative a careful and consistent plan of computing the allowances and setting them up on the books.

The too frequently followed method of setting up a lump sum to cover the estimated depreciation on a whole group of assets, without any analysis of the total, leads eventually to confusion. A much more satisfactory plan is to provide a detailed record of the items of property in each group and to set up a periodical depreciation allowance for each item. Through the use of a form such as was illustrated in Fig. 44, the individual amounts may be easily cumulated, the total becoming a charge to the depreciation expense account and a credit to the reserve.

By this means a complete analysis of the depreciation reserve as well as of the asset account is made available at all times. When a statement of assets and liabilities is drawn up, it can be determined not only what is the total gross and net value assigned to a given group of assets, but also the gross and net value of each item of property comprised in the group. When a piece of the permanent property is scrapped, sold, or otherwise lost to use, the amount of loss can be readily found and the accounts can be adjusted accordingly. The cost of the asset displaced is credited to the asset account, the amount of depreciation accumulated against the asset is charged to the reserve account, and the difference (less any amount recovered from sale or salvage) is charged off to a special expense account, eventually finding its way into the profit and loss summary. By such an entry the asset and the reserve account are both cleared of all trace of the item, and appropriate notations are made in the detail record to show that the asset has been eliminated as part of the operating property.

When the subject of fixed asset accounts and depreciation reserves has alone filled volumes, it is evident that in a discussion

such as the present it can be touched on only in the most general and superficial way. The routine of handling the accounts has, however, been indicated in the preceding paragraphs and presents no difficulties which reasonable care and intelligence cannot overcome. The amount of periodic verification required depends somewhat on the adequacy of the methods adopted, but in general it is limited. It may be desirable to total the detail record each month to prove the accuracy of the ledger control figure, but such proof can usually be deferred for several months or even a year without serious consequence. At the year-end the detail should be carefully checked for both assets and reserves. The list of items of equipment should be scanned by someone familiar with the physical properties and corrected for all changes of which the accounting department has not been previously notified. The rates of depreciation in use should also be studied and increased or decreased if the circumstances seem to suggest that a higher or lower rate is needed.

While the procedure above discussed generally answers the purpose in the case of most fixed assets, there are certain types of property included in this class which may be more satisfactorily handled by means of something like a periodic inventory. These are the items of fluctuating and uncertain value, sometimes lacking individual identity, subject to sudden obsolescence and unexpected destruction, which require to be counted and revalued about every so often, rather than slowly amortized according to some rigid and predetermined plan. Examples of such assets are horses, harness, wagons, containers, and small tools. If the inventory method is decided upon for their adjustment, they will be duly counted at the end of the period and valued by some competent party at their current net, or depreciated, worth. The difference between this value and that appearing in the ledger account will then have to be written off by an entry charging depreciation (expense) and crediting the asset account; the depreciation reserve account is eliminated. The advantages and limitations of this method will be apparent.

Current Liabilities.—The liabilities of a chain store enterprise, while demanding equal accuracy in their handling, present less of a problem than the assets because they are usually less numerous and diverse. In many concerns, particularly the smaller chains, they consist very largely of current obligations to trade creditors. Where goods are bought heavily in advance for

seasonal requirements, there may be a considerable volume of bank loans at certain times during the year. This item and the accounts payable to trade creditors normally comprise the bulk of the concern's indebtedness.

Accounts with trade creditors are built up by means of entries in a voucher register or purchase journal, as noted in an earlier chapter. Where the voucher register is used, the individual entries constitute the detail record of the obligation, being checked off as paid. This record will be dependable if invoices from vendors are entered promptly and items paid are so marked as soon as a check is drawn against them. As in the case of accounts due from customers, the total credits and charges to vendors' accounts are combined in a control account, the balance of which must equal the aggregate of all the individual vouchers "open" (or unchecked) in the voucher register. This agreement of control and detail record should be proved every month.

The procedure in handling a purchase journal and an accounts payable ledger is not very different. Here the detail record consists of a set of accounts with creditors, carried in a separate ledger, and posted from the purchase journal and the cash disbursements book. These accounts are likewise governed by a control account in the general ledger. They should be balanced monthly and the total of their balances should unfailingly agree with the balance of the control account. The individual accounts should be checked against the statements received from creditors to make certain that all invoices have been passed through the journal and that the vendor has duly credited all remittances sent him.

As previously indicated, vendors should be given credit in a certain period only for such goods as have been received and placed in stock prior to the physical inventory taken at the end of the period, unless those not so received are to be set up separately as additional inventory under the heading "Goods in Transit." Toward the close of a period, and immediately afterward when the bookkeeping work for the period is being finished up, the accountant must take particular care to see that the receiving slips attached to the invoices indicate clearly whether the goods were on hand at the inventory date or not. By means of this information he can properly separate the invoices to be entered in the old period from those of the new month. He must likewise assure himself by examining the file of receiving slips that no

goods have been put into stock without an invoice being received and passed before the purchase journal is closed for the period.

Amounts payable to trade creditors may be in the form of notes or acceptances as well as in open accounts. In such event there is usually carried a general ledger control account similar to that for accounts payable, and a detail record showing the amount, payee, maturity, interest rate, and other particulars of each note or acceptance. Standard forms for these details, usually termed "note registers," meet most needs, but the particulars can be written up on plain columnar paper if desired. Notation of each new note given and each old note paid must be made promptly on the detail record, and entries in journal and cash book must also be made to adjust the ledger control accounts. It is easy to overlook the entry for a note given to cover an open account—a charge to accounts payable and a credit to notes payable. Special pains must be taken to record the change in status of the obligation promptly.

The periodic verification of the account will consist of listing the outstanding notes and acceptances payable and comparing the total with the balance of the ledger control. The two figures must agree; any discrepancy indicates an error either in the detail record or the control entries, which should be located without delay. Formal obligations like notes, with definite dates of maturity, must be watched carefully to preserve the company's credit standing, and this task ordinarily devolves upon the accountant. It should receive attention every month.

The accounting procedure in connection with bank loans is almost identical, but since the loans are usually few in number and fairly large in amount they are not apt to be troublesome. The loans are almost always covered by notes and these notes are sometimes grouped with notes to trade creditors in a single account. Generally, however, it is more satisfactory to carry a separate ledger account for bank borrowings. The details can be entered in a separate section of the note register, although if the loans are few it may be possible to enter all necessary particulars in the ledger account itself and eliminate the subsidiary record.

In the matter of accounts payable to other than trade creditors, substantially the same comments apply as in the case of miscellaneous accounts receivable. The accounts may be kept in a separate ledger, under a control, like those with creditors, but more often they appear individually in the general ledger itself.

They are likely to be a heterogeneous lot and each one demands intelligent attention to keep it in line with the facts.

Moreover, there is always a likelihood of the existence of some liabilities of this character which have not found their way onto the books at all. The accountant must not only check up the accounts which are on the books but also keep an eye constantly open for transactions giving rise to obligations not passing through the records in the ordinary way. It is easy for a concern to incur liabilities in an informal manner and if they are ignored by the accountant the financial position will be overstated until the time they are discovered or force themselves on the attention. All orders, contracts, and arrangements for special service of any kind should be available to the accountant so that his records may be kept up-to-date on the matter involved.

Accrued expenses of various kinds form another class of current liabilities. They are the reverse of prepaid expenses, in that here the service is obtained for one or more periods in advance of the date of payment. The accruing obligation must be set up from month to month by charges to the appropriate expense account. In this case also the accountant must keep posted on the amount of liability and make certain that there are no liabilities accruing for which he is not providing.

Where the amount of the liability eventually to be met is definitely known at the outset, the periodic charge can be made accurately and little in the way of verification at the month-end is needed. In those cases, however, where the amount must necessarily be guessed at during a large portion of the year—property taxes in many states are an example—it is essential that the accrual be checked up from time to time in the light of the latest information on the subject, so that an adjustment may be made promptly if the amount is found to be much greater or less than had been anticipated. Interest on outstanding obligations is another item which may easily be misstated; the total accrual may well be checked up from time to time with the note register or other similar record to prove that the calculations made are producing the correct result.

Other Liabilities and Reserves.—As stated above, the current liabilities of a concern generally constitute by far the largest portion of the total liabilities—excluding, of course, the interest of owners as a liability. Mortgages, bonds, and other long-term debts are of infrequent occurrence, because the bulk of the invest-

ment in the average chain enterprise is in current, quickly turning assets, and the concern's indebtedness is accordingly liquidated with promptness. Only under rare conditions does the business involve large investment in permanent equipment like land, buildings, and heavy machinery. As a result mortgages are usually small and few in number, and can be kept track of without difficulty.

Where a large warehouse or factory has been built, or where the retail outlets require expensive equipment or buildings, there may be one or more mortgages or bond issues of considerable size. Size alone presents no complexities in this case, but if the obligations mature serially, are bought and sold at discount or premium, involve sinking fund provisions, and are otherwise extraordinary in nature, they present some problems which it is outside the scope of this book to discuss. In general, however, there is nothing more simple to deal with than a long-term loan, which once set up on the books remains unchanging in amount and character period after period and requires no more attention than is involved in writing the figure down in the trial balance.

The subject of reserves is another which need not bother the accountant of the average chain enterprise and, accordingly, is entitled only to passing comment here. Reserves for depreciation, of course, have already been briefly discussed, but they are merely convenient accounts for accumulating credits which would otherwise be applied directly against the corresponding fixed asset accounts. Similarly, a bad debts reserve may be accumulated as a partial offset to accounts receivable, if there is doubt of all the outstandings being collectible. Reserves which are appropriations of profits for contingencies or for specific purposes are another sort of account altogether, and they involve theoretical considerations which it would be out of place to attempt to discuss at this point.

Capital Investment and Accumulated Profits.—Liabilities of the enterprise determined and set down, there remains the final item of ownership interest to complete the balance sheet. When the amount of the liabilities is deducted from the total value of the assets, the balance represents the owner's equity in the business. All that belongs to no one else belongs to him. When other obligations have been satisfied, the concern is accountable to him for the remainder of its worth.

Ordinarily, he, the owner, has made an original investment in the business—put in some money to start the enterprise on its way. If the business made no profits or losses his investment would remain constant, would never change. But if the business is profitable its net worth increases, his investment grows. If the business loses money its net worth is reduced, the owner's investment shrinks.

The amount of this investment which the owner has in the business is, accordingly, verified in two ways. In the first place, it must equal the net worth of the business as found by deducting the total liabilities from the total assets. In the second place, it must equal the original capital contribution of the owner, minus his withdrawals, plus all accumulated profits, and less all accumulated losses as shown by the profit and loss account. In this way the final item among the balance sheet accounts is found closely tied up with the final results shown by the operating accounts. Verification of the account of the net worth, or ownership interest, becomes at the same time a verification of the results of operation as expressed by the profit and loss summary.

In the case of an individual owner, or a group of partners, it is customary to combine in one account all the data regarding the interest of each in the business. This account is known as the owner's, or partner's, capital account. To it are credited the amount invested by each, and the share of earned profits accruing to each. Against it are charged the withdrawals of each, and the share of losses incurred which each must sustain. The balance of the account represents the net result of all such transactions and occurrences.

In a corporation, where original capital contributions are represented by shares of stock, normally of fixed par value, the procedure is a little different. The capital stock account is kept free from any changes representing profits, losses, or dividends, and its balance will stand at a constant figure except as additional stock is sold or outstanding stock is bought in by the company and canceled. There may be several classes of stock, each covered by a separate ledger account. The capital stock item should be checked up by the company accountant from time to time, particularly where there are frequent changes in ownership of the stock or in the amount outstanding. Verification usually consists of determining the number of shares represented by outstanding certificates (as shown by the stubs in the certificate

books) and proving that the total par value of those shares equals the balance of the ledger capital stock account.

Accumulated profits or losses of a corporation are carried to what is known as an "Undivided Profits" or "Surplus" account. Dividends paid are charged against this surplus account; like an individual owner's withdrawals, they reduce the ownership interest in the business by taking some of it out and devoting it to other purposes. All changes affecting the net worth of the business (except the issuance or retirement of capital stock) are carried into the surplus account, and the capital stock amount is left intact at its original figure. The combined capital stock and surplus accounts represent the total net worth or ownership interest in the business.

In the foregoing chapter has been given a brief discussion of the place which the asset and liability, or "balance sheet," accounts occupy in a system of procedure, the main object of which is to determine the results of operation of a retail chain store business. From the very nature of business transactions the character and value of the concern's property and obligations become a vital factor in establishing the outlines of its financial history. Its profits and losses can be proved only by verifying its assets and liabilities. When this has been done—the operating accounts closed and the balance sheet checked—the accountant is ready to proceed with the final step of his task, the presentation of his story in concrete form to those for whom it holds vital interest.

CHAPTER XV

OPERATING AND FINANCIAL STATEMENTS

An accounting system is a means to an end—or perhaps a means to several ends. There are four functions, it has been said, which the accounting system is expected to perform. These have been designated as the protective, historical, financial, and statistical. So far as the protective function is concerned, the manner in which the accounting system may be made to answer the demands upon it has been fully detailed. So far as the other functions are concerned, however, there remain some essential points to be covered.

Obviously, when a business is viewed from the historical, the financial, or the statistical standpoint it is necessary not only that there be accurate detailed records and correct mechanical procedure in keeping them, but also that the results be summarized, condensed, and presented in tangible form. As long as the accounting procedure involves handling solely by trained accountants, the important points for consideration are theoretical soundness in dealing with the accounts and practical efficiency in handling the records. It has been the endeavor throughout the preceding chapters to display clearly the necessities of the accounting system along those lines.

When, however, the system is complete and the procedure is in operation, it will fall short of its purpose if some means is not provided for telling the story, to whom it may concern. While the accountant has been gathering material, the technique of his procedure is all-important to himself and his department. When he begins to make a presentation of this material to someone else, however, he must take into account the attitude and viewpoint of men not specially trained in the mechanics of account keeping, who demand from him a story told in their own language and appealing to them in terms with which they are thoroughly familiar. The question, then, of presentation of the historical, financial, and statistical aspects of the business becomes an important concern of the accountant at this stage of his undertaking.

General Form of an Operating Statement.—There are certain conventional and rather commonly accepted forms of statement and report by means of which the executives of a business are accustomed to establish contact with the results of the accounting department's activities. The terms by which these statements are designated vary in different undertakings, but the reports themselves are essentially the same. Prominent among these is the primary form of historical statement—the summary of the results of operations during a given period.

The attention of the man who requires this statement is centered for the moment on a very definite question: What profit or loss did the enterprise make during the period, and how did this profit or loss come about? The statement answering these questions is what the accountant calls his "Profit and Loss Account" or "Profit and Loss Statement," and what the manager may term an "Income Statement," an "Operating Statement," a "Statement of Profits and Income," or any one of a dozen other names.

In the simple enterprise, for a normal period, the designing of such a statement presents no particular difficulties. The elements which enter into the statement are pretty definitely known and measured, and even the form of arrangement leaves little room for choice. There is a logical order in which the several items are naturally considered and the accountant will follow this logical order in drawing up his statement.

The first question will naturally concern the gross or total revenues from sales. This is the starting point in reviewing the results of operations. Next in order will be considered the cost of goods sold, however that has been arrived at. For each item of sales revenue which the enterprise has received there has been a corresponding item of outgo in the form of merchandise turned over to customers. Consideration of the one almost inevitably involves consideration of the other, and of the third important point, namely, the difference between the two, or gross margin of profit realized from the transaction.

This gross margin of profit represents the recompense gained by the business for the service which it performs to the community. Out of this gross margin the business must pay its costs of operation—the salaries of its employees, the up-keep of its stores, etc. In the statement, then, the next items for consideration are these necessary deductions—operating expenses of

the stores, warehouse expenses, administration expenses, and any others that may have been incurred. Only after all of these deductions have been taken into consideration can the net income or profit from operations be determined and set forth.

So far as the operations of the business itself are concerned, this finishes the broad outlines of the story. In most cases, however, there is one further factor to consider, from the standpoint of the enterprise as a whole. Almost every concern has a few items of income or expense which are foreign to the regular operations of the business, and these affect its final net profit or loss. Usually, therefore, one more section is required in the statement to take care of these "non-operating" items.

Adjusted for the amount appearing under this heading, the ultimate figure of the income statement represents what the enterprise has gained or lost as a result of its business and other operations during the period under review.

The characteristic appearance of such a statement for a simple business is illustrated below. It will be familiar to most executives and it is presented here largely as a basis for such modification as is required in setting forth the history of a chain store enterprise.

Sales		$xxxx
Cost of Goods Sold		xxxx
Gross Margin		$xxxx
Operating Expenses:		
Store	$xxxx	
Warehouse	xxxx	
Administrative	xxxx	
		xxxx
Profit from Operations		$xxxx
Non-operating Items (Net)		xxxx
Surplus Net Profit (or Loss)		$xxxx

Results of Operations of Individual Store Units.—If the management were interested solely in the result of operations of the chain as a whole, the form of statement presented above might satisfy all the principal requirements. In an enterprise, however, made up of a number of semi-independent units, the accomplishments of each individual unit become also a matter of the greatest interest. If the chief executive is to have any means of judging the ability and efficiency of the various store managers and the earning capacity of the stores in various locations, he must have a corresponding statement for each store. Moreover, he will

BLANK STORES COMPANY
STATEMENT OF RESULTS OF OPERATIONS
for Period Ending______

	Store No. 1	Store No. 2	Store No. 3	Store No. 4	Store No. 5	Store No. 6	Store No. 7	Store No. 8	Total
Sales									
Cost of Goods Sold									
Gross Margin									
Store Expenses									
Wages									
Rent									
Light & Power									
Wrappings									
Repairs									
Insurance									
Taxes									
Depreciation									
Mdse.-Loss									
Total									
Store Profit									
General Expenses									
Warehouse									
Handling									
Administrative									
Total									
Net Operating Profit									

FIG. 51.—Operating Statement.

The above form illustrates a method of presenting the results of operations of a chain of stores comprising a small number of units. The figures for the period will be carried into the proper spaces in this form, either from the ledger operating accounts or from the trial balance work sheet previously discussed. Warehouse, handling, and administrative expenses are shown in one figure; details of these amounts will presumably be shown in a separate report.

ordinarily be vitally interested in the details of the operating expenses and their relationship to the gross business.

Designing a compact, readable statement for a large chain enterprise may be a rather difficult matter. The most desirable arrangement is that which will present the results for the different stores in parallel columns. An illustration of a statement prepared in this way, with store operating expenses shown in detail, is given in Fig. 51. The great advantage of a statement of this character is that it makes possible ready comparison of the items relating to one store with those of the other units in the chain.

There is, of course, a limit to the possible extension of this parallel column form of presentation. A sheet with too many columns becomes cumbersome and difficult to interpret. A mass of figures spread over a large sheet becomes confusing and unintelligible. The chain of 50 or 60 units can hardly show details of the results in each unit on a single sheet.

There are several alternatives in such a situation. For one thing the statement may be condensed into a few items and thus a greater number of units can be brought onto a single sheet of ordinary size, as illustrated in Fig. 52. Details are, of course, sacrificed in such a statement, but they can be shown in supporting schedules, like those illustrated in Fig. 53. Another possible method is to divide the chain into sections or divisions each containing 10 or 12 units; a report in the form given in Fig. 51 can then be prepared for each section and the section totals combined to obtain the grand total. It is possible also to carry a separate sheet for each store, as illustrated previously in Figs. 45 and 46, with one condensed general summary for the chain as a whole.

It will be noted in referring to the illustrations just mentioned that another variation from the basic form of presentation has been suggested. This has to do with the deduction from gross profits of the store operating expenses and the carrying down of a "store profit" figure, before allowance for warehouse and administrative expenses. The purpose of this is obvious. Store operating expenses relate directly to the results of the individual stores. Warehouse and adminstrative expenses are, in fact, expenses of the enterprise as a whole, rather than of any individual store. It is important to know whether a store is earning sufficient gross profits to cover its direct expenses, whether or not its margin may be sufficient to cover also its proportionate part of the general overhead expenses of the entire enterprise. The

BLANK STORES COMPANY

CONDENSED STATEMENT OF OPERATIONS

for Period Ending____________

Store No.	1		2		8	
	Amt.	Pct.	Amt.	Pct.	Amt.	Pct.
Sales						
Cost of Sales						
Gross Margin						
Store Expense						
Store Profit						
General Expense						
Operating Profit						

Store No.	9		10		16	
	Amt.	Pct.	Amt.	Pct.	Amt.	Pct.
Sales						
Cost of Sales						
Gross Margin						
Store Expense						
Store Profit						
General Expense						
Operating Profit						

Store No.	17		18		Total	
	Amt.	Pct.	Amt.	Pct.	Amt.	Pct.
Sales						
Cost of Sales						
Gross Margin						
Store Expense						
Store Profit						
General Expense						
Operating Profit						

FIG. 52.—Another Form of Operating Statement.

The condensed statement illustrated above may be utilized where the number of stores in the chain makes it impossible to present on a single sheet the amount of detail given in Fig. 51. A report of this kind shows the general outlines of the profit and loss account for each store and also the percentages of the various elements to sales. Particulars of the expense groups can be submitted separately on a form such as is illustrated in Fig. 53.

warehouse and administrative expenses must of necessity be apportioned or prorated on some more or less arbitrary basis, if they are to be charged to the individual stores at all. The question of whether the amount charged can be fully absorbed by any particular store is secondary to the question of what the store is doing on its own account, without reference to the amount of general overhead it is expected to carry.

In previous chapters some reference has been made to the methods by which warehouse and administrative expenses can be allocated to the stores. As has just been said, the basis, whatever it is, will necessarily be a somewhat arbitrary one. In the case of warehouse expenses the total volume of business done would seem to be a fair measure of the burden to be carried by each store. The same thing would probably apply to delivery expense, although, if some of the stores were located at a great distance from the warehouse, it might be technically more accurate to make allowance for this difference.

Satisfactory apportionment of administrative expenses is even more difficult to accomplish. Volume of business has something to do with the question no doubt, but to a certain extent each store involves a definite amount of administrative expense which is the same as that chargeable to every other store, regardless of its volume of business. Probably the amount prorated to each store should bear some relation to its volume of business, but be not less than a fixed minimum charge.

The amount of detailed calculation and apportionment which the chain store accountant will go through depends on his taste for computation and his desire for theoretical accuracy. Probably in the average business a reasonably satisfactory result will be obtained by apportioning the entire amount of the warehouse and administrative expenses among the stores on the basis of the gross sales of each. In other words, each store will be expected to carry the same proportion of the total general overhead expenses that its gross sales are of the aggregate gross sales of the entire chain.

Analyses and Comparisons.—The uses to be made of such statements as have just been described are manifold. The principal ones will immediately suggest themselves. The weak units in the chain will display their character by their inability to carry their proportionate part of the general overhead expenses. Some may even be unable to earn their direct operating

BLANK STORES COMPANY.

DETAILS OF STORE OPERATING EXPENSES

for Period Ending ____________

	1	2	3	4	5	6	7	8	9	10
Wages										
Rent										
Lt. & Power										
Wrappings										
Repairs										
Insurance										
Taxes										
Depreciation										
Mdse. Loss										
Total										

	11	12	13	14	15	16	17	18	19	Total
Wages										
Rent										
Lt. & Power										
Wrappings										
Repairs										
Insurance										
Taxes										
Depreciation										
Mdse. Loss										
Total										

FIG. 53.—Detailed Expense Statement.

In some form such as is illustrated above the particulars of store operating expenses may be presented, in support of the totals given in the statement illustrated in Fig. 52. The various items called for by this form may be entered either from the ledger accounts or from the trial balance work sheet, and the totals when arrived at may be carried into the general operating statement. Similarly, a separate statement may be prepared for operating expenses of the warehouse, delivery department, factory, building operation department, and any other subsidiary activities of the concern.

expenses—that is, their gross margin of profit may not be sufficient to cover the expenses of running the store. Such a situation, of course, suggests further analysis of the information in the report. In point of fact it will probably be desirable to analyze the operations of all the stores, though, of course, the weaker ones make the most insistent demands for study.

A satisfactory analysis can ordinarily be made only through comparison of results. This comparison may be between the operations of different stores, or the operations of one period with those of some preceding period. Again, analysis usually involves comparison of one item in the statement with other items to determine their percentage relationship. The mere amount of a given profit or expense is not alone conclusive. It is the relationship of the amount to other amounts in the same or similar statements which furnishes a measure of the efficiency of operation. Expenses, profit margins, and the like are largely relative.

As a guide to the making of important analyses, there may be set down certain relationships which the management will normally want to examine—not necessarily for every store for every period, but for all stores occasionally and for the weaker units on every possible occasion. These relationships may be grouped as follows:

1. Within the store:
   (*a*) Percentage of gross profit margin to sales
   (*b*) Percentage of each expense item and total expenses to sales
   (*c*) Percentage of store profit to sales
   (*d*) Percentage of net operating profit (after all deductions) to sales

2. Between stores:
   (*a*) Percentage of sales of each store to total sales of chain
   (*b*) Comparison of gross margin of profit of single store with average for chain; with best store in chain; with poorest store in chain
   (*c*) Similar comparison for individual store operating expenses
   (*d*) Similar comparison for store profits and for net profit after all deductions

3. Between periods:
   (*a*) Comparison of each significant item in the operating statement with the corresponding item for last month
   (*b*) Similar comparison with the corresponding month of preceding year
   (*c*) Similar comparison involving the total for all months of the current year with the corresponding period of the preceding year.

It is evident that to make all the comparisons above suggested for every item in every store every period would involve a tremendous amount of clerical work which would be unjustified by the results. Common sense must be applied to the problem. Some of these comparisons will be made every month, some infrequently. The percentages of individual profit and expense items to the gross sales of each store, for example, are very significant and perhaps should be calculated each month. Other percentages and relationships, however, will probably be determined only at longer intervals.

The use of standards and averages will be very helpful. For example, after the record of a store or a group of stores is known for three months, six months, or a year, that record may be used as a standard of comparison. The averages for each half-year or year period may be worked up and combined with those of preceding periods, with no unreasonable amount of statistical labor. The concern can soon build up for itself a very informative record of the sort of results which may be expected from each unit in the chain under any given set of conditions.

It seems almost superfluous to discuss further the usefulness of such standards and averages. The management may readily learn from a year's experience about what relation different items of store expense should bear to the total volume of business. A cursory survey of the operating results for each month will indicate whether any given store is running close to the expectations or otherwise. The first tendency toward weakness in any unit can be detected. Improper or extravagant management will be shown in the statement as promptly as a shortage of goods or cash will be detected by a satisfactory perpetual inventory system.

Since the aim of this chapter is the discussion of the preparation and use of the operating and financial statements as a whole, it will be proper to defer more extended consideration of merchandise and expense statistics to later pages. The importance to the business of sales, purchase, and inventory relationships, operating expense percentages, etc. is given further attention in Chap. XVI.

Total Net Profits of the Chain.—Whatever emphasis is placed on results of operation in each store unit, it is apparent that from a financial standpoint the owners of the business are interested above all else in the result of operations as a whole. The operating unit may be most important from the managerial standpoint, but the grand total is unquestionably of greatest interest to the

proprietors of the enterprise. There is a certain amount of capital tied up in the business, and what that capital is earning for its owners in the aggregate is a matter in which they are very much concerned.

The suggested statement forms given in Figs. 51 and 52 present the results of the enterprise down to the point of net profit from operations. As mentioned briefly at the outset, there may be certain other items which intervene between this net operating profit figure and the amount which finally reverts to the owners of the business as their return on their investment. Among these items may be quoted interest paid on loans. This amount sometimes assumes considerable proportions. It has nothing to do with the operations of the business as such, but represents a sum which the owners must pay to others for the use of borrowed capital in their business. Similarly, if the business receives interest on loans on investments of its own funds, that income cannot be said to be a part of the result of operating its stores.

In addition to these so-called financial items of income and expense, there may be other additions to their deductions from the operating profits. By one means or another almost every concern is at one time drawn into transactions which involve either a profit or a loss entirely dissociated from the normal operations of its business. Usually, these amounts are of negligible proportions but they require to be taken up somewhere in a statement of net profits. There is, of course, also the ever present item of income taxes, which must be provided for out of profits which would otherwise pass to the owners of the concern.

In order to reflect this situation clearly, it will usually be necessary to supplement the detailed operating statement with a summary in which is brought down the final or "Surplus Net Profit" figure for the period under review. In its general outlines, this statement will not differ greatly from the basic form of profit and loss statement which was presented on page 218, but, in order to show clearly how each item may be handled, another illustration is given in Fig. 54. It will be observed that in this illustration the totals from the operating statement are recapitulated with the addition of the non-operating items.

The disposition of the profits earned forms another subject of interest to the owners of the business. In a corporation there is little room for variation in this matter. The total profits earned become a part of the corporation surplus or undivided profits.

BLANK STORES COMPANY

CONSOLIDATED STATEMENT OF OPERATING RESULTS

(ALL STORES AND DEPARTMENTS)

For Period Ending________________

Retail Stores:			
Sales		$........	
Cost of Goods Sold		________	
Gross Margin		$........	
Store Expenses		________	
Store Profit		$........	
General Expenses			
Warehouse & Handling	$........		
Administrative	________		
		________	
Net Profits from Store Operations		....	$........
Other Income and Expense:			
Manufacturing Dept. Profit		$........	
Building Operation Profit		....	
Miscellaneous Income		________	
		$........	
Less: Miscellaneous Expense		________	
			________
Total Income			$........
Deductions: Interest, etc			________
Surplus Net Profit (before Federal Taxes)			$________

FIG. 54.—General Operating Statement.

The simple form illustrated above may be used to present the results of operations for the enterprise as a whole. The first section covers the combined results for all the retail stores, while the remaining portion of the statement shows the results for other operating and miscellaneous departments. The final "surplus net profit" figure represents the increase in the net worth of the enterprise during the period and will, accordingly, appear in the "Surplus" section of the accompanying balance sheet (see Figs. 55 and 56). The form above is suitable for a monthly report; if the results of an entire year were being presented, there would be some additional sections to show deduction of Federal income and profits taxes, and also possibly some information as to the amount of profits distributed in dividends or otherwise withdrawn from the business.

No attempt has been made in this form to include any statistical information. The importance of relationships and comparisons has been indicated in the text of Chaps. XV and XVI. Operating and financial statements may well be expanded to show these percentages and relationships in addition to the results expressed solely in terms of dollars and cents.

The stockholders can receive these profits only as the corporation pays them out in the form of dividends. Such dividends are normally expressed as a percentage of the outstanding capital stock. The amount paid out as a dividend may be less than the total earnings, the balance being allowed to remain in the business. On the other hand, the dividend may be greater than the earnings for the particular period under review, the excess being taken from accumulated undivided earnings of prior periods.

In any event, the balance of the undivided profits is determined by the simple calculation indicated below:

Balance of undivided profits at beginning of period	$xxxx
Add: Net earnings for period	xxxx
Total earnings available during period	$xxxx
Deduct: Dividends paid during period	xxxx
Balance of undivided profits at end of period	$xxxx

The results in the case of a partnership or in a single proprietorship are similar, although expressed in a slightly different way. If there are several partners, the earnings are apportioned between them on the basis of their agreement; each partner has a sort of "undivided profits account" of his own, to which are added his share of the net earnings and from which are deducted the amounts which he draws out of the business for his personal use. The distribution of the partnership profits sometimes involves difficulties and misunderstandings, but its features are outside the scope of this volume. No difficulties arise in the case of a single proprietorship, where the total net earnings become the unrestricted property of the owner and are reduced only by his personal withdrawals or subsequent losses of the enterprise.

It will be understood in all of the above discussions of net earnings that disposal of net losses is made in practically the same way. Obviously, however, a net loss has the opposite effect, reducing the undivided profits of the business instead of increasing them. In the statements a net loss is customarily shown in red ink. The bookkeeping treatment should be clear from the discussion in earlier chapters.

The Statement of Financial Position.—The preceding paragraphs cover in a general way the form of presentation of a chain store operating statement. When such a statement has been drawn up with due care and accuracy, the function of the

accounting system from the historical standpoint may be said to have been fulfilled. The mechanics of record keeping have been supplemented by a straightforward, intelligible report of the results, from which the management can learn the vital details of what has transpired in the business during the period under review.

No such operating statement, however, is complete without a corresponding report of the financial conditions of the enterprise at the closing date. The operating statement is an analysis of the change which has taken place in the business. When a change takes place a new situation is created. What the new situation is depends on the character and extent of the change. One phase of the problem can be fully understood only by attention to the other phase as well.

In other words, it behooves the manager of the enterprise to view his business from the financial standpoint at the same time he looks over its historical records. For this purpose he will require a statement of the assets and liabilities of the enterprise as they stand in consequence of the recent operating profits or losses. Such a statement, commonly known as a "balance sheet," should be prepared to complement and support the analysis of operating results.

The means of obtaining data for a statement of assets and liabilities have already been fully discussed in Chap. XIV. It was said in that chapter that the asset and liability accounts must necessarily be adjusted to the proper figures before a correct statement of profit and loss can be prepared. It remains, then, only to arrange these asset and liability items for presentation in the most satisfactory form, and to provide for their comparison with other items in such manner as to shed as much light as possible on conditions and tendencies in the enterprise.

It is not intended in this book to attempt any exhaustive discussion of the various ways of presenting a balance sheet. There are volumes dealing with the question; not only have numberless textbook writers treated it in detail, but bankers, trade associations, governmental agencies, and others have put forth an astonishing amount of literature on the subject. The problem, in so far as the chain store is concerned, differs in hardly any particular from that of other retail business and is, therefore, entitled to be considered here only in a general way.

It may well be pointed out, however, that some standard form of arrangement is essential to a full understanding of the balance

sheet by managers and owners, and that the accountant should take the greatest care in classifying the assets and liabilities and grouping them for statement purposes. Certain kinds of assets are of kindred nature and should naturally be placed together in the balance sheet. There is a logical order of arrangement, under which the most current assets (those first to be converted into cash) are listed at the beginning of the statement, while the most fixed (or slow-moving) appear at the end. Similarly, the obligations which must be first paid off appear at the head of the list of liabilities, while those of later maturity follow in order. The proprietor's investment is shown as the final item.

Form of the Financial Statement.—The items which appear in a balance sheet are taken, of course, from the ledger accounts, or perhaps from a trial balance which has been abstracted from the ledger. Each asset and liability represented in the ledger must find a place somewhere in the balance sheet. It goes almost without saying, however, that the balance sheet list of assets and liabilities is not necessarily identical with the trial balance list. Several unimportant items may each have a separate account in the ledger, but can well be combined under an appropriate title for balance sheet presentation. On the other hand, there may be some ledger account comprising several items of individual size and importance, so that it may possibly be necessary to split the account balance up into several pieces in order to make the financial statement perfectly clear.

The form in which the statement is drawn up is often important. If the business is a small one, a single column list of both assets and liabilities may be sufficiently informative. In a large enterprise, however, it is usually desired to show certain group or subtotals, because of the light they throw cn the financial position and needs of the business. For example, the relationship of the total current assets of an enterprise (cash, accounts receivable, and merchandise inventories) to the current liabilities is almost always considered an index of the financial strength of the concern from a current operating standpoint. The use of other subtotals in the body of the statement will quickly suggest itself.

To illustrate how such a statement may well be made up, a sample form is given in Fig. 55. Such a statement will occupy only a fair sized sheet, yet furnishes almost any information which is likely to be desired, not only regarding individual items but also concerning the natural groups into which such items fall.

BLANK STORES COMPANY

Balance Sheet at June 30, 1923

Assets

Current Assets:			
Cash:			
Bank Balances....................	$		
Petty Funds......................			
		$	
Accounts Receivable:			
Customers........................	$		
Others...........................			
Merchandise Inventories:			
Retail Stores....................	$		
Warehouse........................			
Factory..........................			
Prepaid Expense:			
Rentals..........................	$		
Operating Supplies...............			
			$
Fixed Assets:			
Delivery Equipment:			
Trucks, Wagons, etc..............	$		
Less: Depreciation Reserve.........			
		$	
Store Equipment:			
Furniture and Fixtures...........	$		
Less: Depreciation Reserve.........			
Warehouse Equipment:			
Furniture and Fixtures...........	$		
Less: Depreciation Reserve.........			
Factory Equipment:			
Machinery, Tools, etc..............	$		
Less: Depreciation Reserve.........			
Office Equipment:			
Furniture and Fixtures...........	$		
Less: Depreciation Reserve.........			
			$

Liabilities

Current Liabilities:			
Accounts Payable:			
Trade Creditors..................	$		
Others...........................			
		$	
Notes Payable:			
Trade Creditors..................	$		
Bank Loans.......................			
Others...........................			
Accrued Expense:			
Taxes............................	$		
Interest.........................			
			$
Capital Stock:			
Preferred:			
Issued and Outstanding.....................		$	
Common:			
Issued and Outstanding.....................			
Surplus:			
Undivided Profits—Beginning of Period.........		$	
Add: Profits Earned This Period...............			
		$	
Deduct: Dividends Paid This Period............			
Undivided Profits—End of Period..............			
			$

Fig. 55.—Balance Sheet.

In the above illustration is shown a typical detailed balance sheet, items being arranged and grouped so as to present the information in the most intelligible form. Such a statement may be easily prepared at the close of each accounting period and should be submitted in connection with the statement of operating results.

The relationship of any given group of assets to another group, or to the liability or net worth items, can be seen at a glance.

This question of relationship may easily be as important in consideration of the balance sheet as it is in study of the profit and loss account or operating statement. It will probably not be sufficient for the manager to know merely where he stands at the present time; he will be interested in learning also how the present position compares with that of preceding periods. Even when the operating statement indicates a profit, a comparison of this month's balance sheet with that of last month or last year may indicate unhealthy tendencies in the business.

For this reason the detailed analytical balance sheet illustrated in Fig. 55 may require to be supplemented at intervals by a comparative balance sheet such as is illustrated in Fig. 56. When comparisons are to be made between the situation at one date and that at a preceding date it will be serviceable to condense the information as much as possible, so that the important points will stand out and not be obscured by an excess of detail. Individual items become of less importance than the "group totals" previously mentioned, and the latter may, therefore, well be substituted for the former in the comparative statement.

With what previous balance sheet shall the current statement of assets and liabilities be compared? Probably with the one for the beginning of the period which the operating statement has been made to cover. In other words, if an operating statement is made up every month, the balance sheet at the end of the month may well be compared with the balance sheet at the beginning of the month. If, however, a comparative statement of operations is prepared for the management not more than once every three or six months, then the balance sheet at the closing date will be compared with that at the beginning of the quarter or half year reviewed. It must be remembered again that the operating statement and the balance sheet must be read in conjunction; the balance sheets show the situation at the beginning and the end of the period, while the operating statement explains the changes which have taken place in the interim.

A Guide to Merchandising and Financial Policies.—It is probably beyond the scope of a work on accounting to discuss in detail all the uses of the financial statement in suggesting and guiding managerial policies. Once the executive has learned to understand what the items in a financial statement represent, he

BLANK STORES COMPANY

CONDENSED COMPARATIVE BALANCE SHEETS

MAY 31 AND JUNE 30, 1923

Assets	*May 31*	*June 30*	*Incr. or Decr.*
Current Assets:			
Cash in Bank and on Hand	$	$	$
Accounts Receivable			
Merchandise—Stores			
Merchandise—Warehouse			
Merchandise—Factory			
Prepaid Expense			
Total Current Assets	$	$	$
Fixed Assets:			
Delivery Trucks, Wagons, etc.	$	$	$
Store Fixtures and Equipment			
Warehouse Fixtures and Equipment			
Factory Machinery, Tools, etc.			
Office Furniture and Fixtures			
	$	$	$
Less: Depreciation Reserves			
Total Fixed Assets	$	$	$
Total Assets	$	$	$

Liabilities	*May 31*	*June 30*	*Incr. or Decr.*
Current Liabilities:			
Accounts Payable	$	$	$
Notes Payable—Trade			
Notes Payable—Bank			
Accrued Expense			
Total Current Liabilities	$	$	$
Capital Stock:			
Preferred	$	$	$
Common			
Total	$	$	$
Surplus:			
Balance—Beginning of Period	$	$	$
Profits Earned			
	$	$	$
Dividends Paid			
Balance—End of Period	$	$	$
Total Liabilities and Net Worth	$	$	$

FIG. 56.—Comparative Balance Sheets.

The illustration above presents two consecutive monthly balance sheets, arranged in comparative form. The information conveyed by such a statement will be of unquestionable value to the management in following the course of events in the business. The statement of operating results is by this means supplemented with a statement showing the effect of those results on the financial position of the concern. The balance sheets have been condensed to avoid confusing detail, but will bring out the salient features of the company's condition. It will be understood, of course, that not all of the assets and liabilities to be found in a chain store enterprise are listed either in this statement, or in that given as Fig. 55. The items included are merely the ones generally met with in the ordinary commercial enterprise of this character.

will ordinarily be prompt enough to recognize their significance and their possible use in charting his future course. The balance sheet items are nothing but expressions in money terms of the facts of the merchandising or the financial situation with which the manager is constantly dealing, even though unconsciously. The facts are laid before him so that he may know with exactness the particulars of the situation and not be obliged to proceed with mere guesswork as a guide.

Obviously, the principal problems on which the balance sheet offers essential information are those of keeping the merchandise moving and providing enough capital for the efficient conduct of the business. As to merchandise, the value of the current inventory furnishes a guide post that cannot be ignored. Has the amount of goods on hand increased or decreased during the month? Is such an increase or decrease to be expected at this time of the year? How does the total inventory compare with current sales volume? In view of current price tendencies, should the business be accumulating a large stock or keeping its inventory at a minimum? These are questions to which the manager will find at least the beginning of an answer in the balance sheet. If the situation is unexpected or difficult, a reference can readily be made to supporting records to ascertain what are the weak or unusual points to be watched.

In the matter of obtaining capital, the manager must look forward as well as back. The capital requirements of his enterprise may fluctuate greatly at different seasons of the year. The records may show that a larger amount of goods must be carried during the next few months. Will the concern's cash resources be sufficient to pay for them, or must credit be sought at the banks? In the latter event is there reasonable assurance that the bank loans can be paid at maturity? Is the business expanding? If so, will accumulated undivided profits be sufficient to take care of the increased investment necessary, or must additional capital be put into the enterprise? Bank loans will carry a temporary increase in the investment if that investment is soon to be liquidated in cash. If, however, it is a question of permanent growth in the business, the owners must contribute more capital, either by allowing the profits to remain in the business or by putting in more money from the outside—possibly both.

The problem of financing a chain store enterprise may easily become acute. If the business is successful, there is always a

tendency to enlarge it—increase the number of stores and expand in all directions. Expansion inevitably requires more capital. Each new store opened means a certain amount tied up in a stock of goods, the purchase of additional fixtures, possibly temporary losses while the store is becoming established, and other drains on the capital resources of the concern. As long as this expansion can be financed out of the earnings of the business, well and good. To attempt, however, to finance such expansion by short-term loans from banks may prove disastrous. The investment becomes a permanent one, while the bank loan must shortly be paid off.

Moreover, the ordinary chain enterprise has little in the way of fixed property and plant which can be offered as security for long-time loans. In a manufacturing establishment much of the capital of the enterprise is represented by its land, buildings, machinery, tools, etc. Since these are assets of long life and usefulness, sound financing offers no objection to their purchase being made possible by the assumption of comparatively long-term obligations. This is not the case with the chain store. Its assets for the most part consist of cash and merchandise offered for sale, with possibly also some outstanding accounts receivable. These items are fluid, quickly consumed or turned over in the operation of the business. They may require less capital to finance them, but such capital investment as they do represent is expected to come from the owners of the business, unless it is to be repaid almost as promptly as the goods themselves are turned over and realized upon.

The manager has an invaluable aid in the proper solution of problems of this kind in an accurate, well-prepared balance sheet. From such a statement he may learn promptly the details of the current situation, and with reasonable foresight he may anticipate what sort of a situation will result in three months, six months, or a year from the merchandising and financial policies he plans to pursue. If there is a fault or a weakness in those policies, it will be revealed. While he may be unable to forecast the trend of events as far as prices, volume of sales, etc. are concerned, he can at least determine where the business may reasonably expect to find itself if it continues to operate under anticipated conditions. He will at least avoid the risk of running into a precarious financial situation which could be avoided by a full realization of the exact situation of the business and its inevitable merchandise and capital requirements.

CHAPTER XVI

STATISTICS OF THE BUSINESS

It has already been said that one function of the accounting system is the accumulation of statistics on the affairs of the business. This means no more than that when records have been kept to show profits and losses and financial position of the concern, it is desirable to analyze the results and the position and bring out certain basic facts which will be useful in anticipating and judging future results.

The term "statistics" often has a fearsome sound, even to those who are reasonably familiar with a standard conventional balance sheet and operating statement. As used here, however, the term implies simply an expression of the averages, percentages, relationships, etc. in which every manager soon becomes interested if he keeps himself well informed as to what is going on in his enterprise. Through analyses and comparison of results the manager can learn from an operating statement not only the bare facts of what has happened, but also whether those happenings are what he has reason to expect, whether they are better or worse than those of other periods, and what they indicate is likely to happen in the future.

The sort of analysis and comparison in which the manager will be most interested has already been suggested in a condensed outline appearing on page 224. To make more definite the manner in which these statistics may be gathered and the uses to which they are put, it seems worth while to give them some further attention in this chapter.

For the most part these useful statistics are matters of comparison. The comparisons are of two kinds. In the first place, there will be comparisons of one feature of the results for a given operating unit with some other feature for the same unit. The net profits of a certain store, for example, will be compared with its gross sales or volume of business. In the second place, the amounts and relationships shown in one operating unit will be compared with those of other units or of the same unit for other

periods. Expenses of store No. 1, for instance, will be compared with expenses of store No. 2 for the same month and also with its own expenses for other preceding months.

It would be impossible, of course, in any brief space to indicate the entire list of relationships which might be thus examined. Many of them will suggest themselves. The manager who becomes accustomed to finding at his disposal explicit and accurate data on all phases of operations will soon instinctively select for himself the comparisons which he must make to form an intelligent judgment on the situation. There can well be indicated here, however, certain outstanding problems of every chain store enterprise, the solution of which can be hastened by intelligent use of figures which the accounting department should be able to present.

Turnover in the Retail Store.—Foremost among these in many enterprises is the problem of keeping merchandise stocks in the proper relation to the volume of business. Carrying stocks of merchandise and making them available to the consuming public is the function of the retail store. Keeping on hand just the right amount of each class of goods is a difficult task, even for the individual retail merchant who is concerned only with a single store under his direct supervision. In the chain enterprise the task is multiplied by the large number of stores involved, and the absence of any possible direct supervision by one individual over all the various stocks of goods.

It is apparent that one of the first concerns of the merchandise manager must be the size and condition of the stocks of goods in the several retail stores. There is a tendency in every business to pile up stocks of merchandise in greater volume than is required for current needs. The store manager, if not held in check, is likely to fill up his storeroom with all the goods it will hold. This has two bad features. One is the possibility of the goods becoming shelf-worn, spoiled, or obsolete. The other is that every dollar's worth of stock represents an additional dollar of investment tied up in the business. Naturally, the greater the investment the smaller will be the proportionate return represented by a given amount of profit.

On the latter point a manager or owner can quickly satisfy himself by some rough calculation. If, for example, in a chain of 20 stores each store requires an inventory of $2,000, the total investment in merchandise stocks should not amount to more

than $40,000. If each store manager were permitted to let his stock run up to, say, $2,500, the aggregate investment would be increased to $50,000. Unless the increased stock resulted in increased sales and increased profits, it is evident that the owners would be receiving no greater return on a $50,000 investment than they should properly obtain from a $40,000 investment. The extra $10,000 invested in this case would yield absolutely nothing.

There is a matter of nice adjustment involved here. The store must not be permitted to lose sales through failure to keep an adequate stock. On the other hand, it must not lose profits to the concern through tying up unproductive capital. That capital might otherwise, for example, be used to start additional stores, each of which would earn a profit of its own.

Statistics as to the retail store stocks will, therefore, center around the question of the relation of the stock on hand to the volume of business being done. This is simply the often discussed question of turnover. How many times does the store "turn" its stock during the month or year? As soon as the management has some data for several periods from a number of stores, conclusions can be drawn as to how many times this turnover should take place. The best store in the chain—that is, the one with the most rapid rate of turnover—may be taken as the basis for comparison. Not every store will come up to this standard, but, obviously, the ones which fall the farthest away from it demand investigation. If in a certain store the turnover is slow, it would seem either that sales possibilities are not being properly developed, or that the manager is carrying too large a stock in proportion to his potential volume of business.

In most classes of business the amount of stock on hand in each store can be determined, at least by estimate, at the end of every month. Since the sales of the store are reported daily, it is easy to compile the total sales for the month, and the cost value of the goods sold can be calculated with reasonable accuracy. The turnover of each store each month can be found by simply dividing the inventory amount into the cost of goods sold. For those stores where the rate seems to be normal or satisfactory, no further action need be taken, but for those stores where the rate is slow, an investigation is in order to determine the cause and remedy the weakness.

There is another point of interest in connection with the stocks at retail stores. The general rate of turnover may continue satisfactorily but the store may become overstocked on some one article. This will not be revealed except by a detailed physical inventory. Whenever such an inventory is taken, it should be examined by the merchandise manager to determine whether such a situation exists. If the article is not moving in the store which has it, possibly some other store can sell it. The accumulation of dead stock must be avoided. It may even be necessary to require the store manager to make a special report from time to time of all goods that have been on his shelves more than a reasonable length of time.

Central Warehouse Stocks.—The merchandise problem, of course, does not stop with the store inventories. In the larger chains in most lines of business there is a central warehouse stock to be considered also. Here probably some form of perpetual inventory will be in force. By the setting of maximum and minimum quantities for given items the merchandise manager may secure an almost automatic notification when stock is running low, and also avoid accumulating too large a quantity of goods. Obviously, however, some experience is necessary before these maximum and minimum quantities can satisfactorily be set.

The problem in the central warehouse often becomes one of keeping on hand a sufficient stock, rather than avoiding an oversupply. The stock of the retail stores can be kept down to a minimum only where they are able to replenish that stock quickly if the need arises. The central warehouse must anticipate the demands of the retail store and make its own arrangements to have the goods available when the demand comes.

Goods may not be obtainable on 24 hours' notice; purchases must often be made well in advance to insure arrival of the merchandise at the time wanted. More important than the mere time element may be the question of price. An order placed in haste with instructions to rush delivery cannot command the lowest prices. These are ordinarily secured only by contracting well in advance for a large quantity of goods and permitting the manufacturer ample time to complete and ship them.

In this connection the cost of storage may enter into the calculations. The decision as to buying a season's supply of goods at a certain time may hinge on whether it will cost more to store the goods for a number of months or to pay a higher price

for them later on. In every such case the intelligent buyer must be fortified with a definite knowledge of how fast the stock may be expected to turn and how much it will cost to carry the goods, including the factor of return on the investment. Statistics on sales of this and similar articles during previous periods, together with an adequate analysis of storage and handling costs, are essential to a proper solution of the problem.

The turnover question often enters the manager's calculations from another angle. This has to do with pricing the goods for sale. The chain store usually sets the pace in the matter of prices. Its management will be anxious to mark the goods at the lowest selling price consistent with making a reasonable margin of profit.

BLANK STORES COMPANY

ANALYSIS OF MERCHANDISE TURNOVER

(BY STORES)

Period Ending______________

Store No.	Current Month				Year to Date			
	Average Inventory	Cost of Goods Sold	Turnover during Month	Annual Turnover Rate	Average Inventory	Cost of Goods Sold	Turnover during Period	Annual Turnover Rate

FIG. 57.—Merchandise Turnover Analysis (by Stores).

In the illustration above there is shown the merchandise turnover of each store in the chain, both for the current month and for the year to date. The average inventory of the store may be determined roughly from the amount of the opening and the closing inventory. The cost of goods sold will be found by means of one of the plans suggested in Chaps. VI, VII, and VIII. When the cost of goods sold is divided by the average inventory, the resulting figure will show the turnover during the month or other period involved. This can be placed on an annual basis for comparison with the results of previous periods.

Most managers are agreed that quickly moving goods can profitably be sold on a smaller margin than those with a slower rate of turnover. Goods that move rapidly involve less storage cost, require capital investment for a shorter time, run less risk of deterioration, etc. The management, therefore, should know in setting prices the turnover to be anticipated for each class of goods.

Information of this kind can usually be secured from the warehouse records more satisfactorily than in any other way. Frequently it is not feasible to keep a record in the retail stores of the sales by individual articles or even by classes of goods. Where a perpetual inventory is in use in the warehouse, the

rapidity of stock turnover can be determined pretty accurately from the deliveries to the retail stores.

The character and appearance of statistical reports will differ so much in different types of business that it is not very satisfactory to attempt to present illustrations of the general scope. In Figs. 57 and 58, however, there are presented the outlines of two merchandise analyses which may well be utilized in many kinds of business. They show concretely the manner in which the accounting department may furnish invaluable aid to the management in formulating correct merchandising policies.

BLANK STORES COMPANY

ANALYSIS OF MERCHANDISE TURNOVER

(BY COMMODITIES HANDLED)

Period Ending________________

Item	Unit of Measure	Set Quantities		No. Days Required on Purch. Order	Units Handled		Turnover Rate	Average Invty. Value			Average Gross Profit			Pct. of Profit of Investmt.
		Max.	Min.		Average Whse. Stock	Average Del'd to Stores		Unit	Total		Unit	Total		

FIG. 58.—Merchandise Turnover Analysis (by Commodities).

In this illustration is presented a somewhat detailed analysis of the turnover rate and profits realized in the handling of different kinds of merchandise. Such an analysis might well be prepared once every six months. The average quantities on hand and delivered to stores may be determined from the warehouse stock records. From the turnover rate and the number of days required to obtain delivery on new purchase orders, the merchandise manager may determine whether the set maximum and minimum quantities have been properly figured. From the relation of the average gross profit (estimated) to the total average amount invested in the inventory, it can be determined whether a reasonable rate is being realized. As a result of such an analysis it will be possible to determine accurately whether the percentage of profit is adequate, the average stock too high or too low, and, in general, whether the particular line is a profitable one to handle or not.

Sales Analyses—Expenses and Profit Ratios.—Another point on which the management may wish to collect some statistics is that of sales volume in the various stores. In the large chain enterprises where such questions have been studied scientifically, the management is often able to forecast with reasonable accuracy the amount of business which may be expected from a store in a given locality. Through a careful examination into all the factors which may affect the location, an experienced manager can often predict substantially how many customers will visit

the store each week, or month, and what their total purchases will probably be.

It may not be possible for a smaller chain enterprise to make the same extensive analysis of a situation which a larger concern can carry out, but it is thoroughly practical for the management to estimate the sales potentialities of any given location. It is neither difficult nor expensive to determine approximately how large a population is to be served, what the buying habits of that population are, what kind and amount of competition is to be met, and similar factors. Once the store is established, the volume of its sales can be carefully watched with a view to determining whether it is getting all the business to which it would seem to be entitled. Any store which falls noticeably short of a reasonable quota demands investigation.

Changing conditions also have their effect on the volume of business of each store. In a growing neighborhood it is reasonable to expect that business of the store will increase in proportion to the increase in population to be served. Any store whose sales have a tendency to decrease must be watched. The ordinary seasonal fluctuations will be learned from the experience of a year or two and allowance for them can be made in drawing comparisons.

Another fact of importance in judging the efficiency of a retail store has to do with the amount of the average customer's purchase. Volume of business is secured not merely by drawing a large number of customers to the store, but by obtaining a substantial order from each customer. Some store managers are able, through good merchandising methods, to increase the average sale per customer. The means of doing this are well known—attractive display of goods likely to be in demand, signs calling attention to special values, verbal reminders of articles likely to be overlooked, etc.

It was said in Chap. III that any information along this line must necessarily be collected in the store and made a part of the daily store report. It is not necessary of course for the store manager to figure out the averages, but he must be able to inform the head office as to how many customers visited the store each day. It is then a simple matter for the general bookkeeper or accountant to calculate the average sale per customer. The management will strive to have each store draw as many customers as possible, and, in addition, to have each customer buy

BLANK STORES COMPANY
GRAPH SHOWING SALES AND NET PROFITS
BY WEEKLY PERIODS

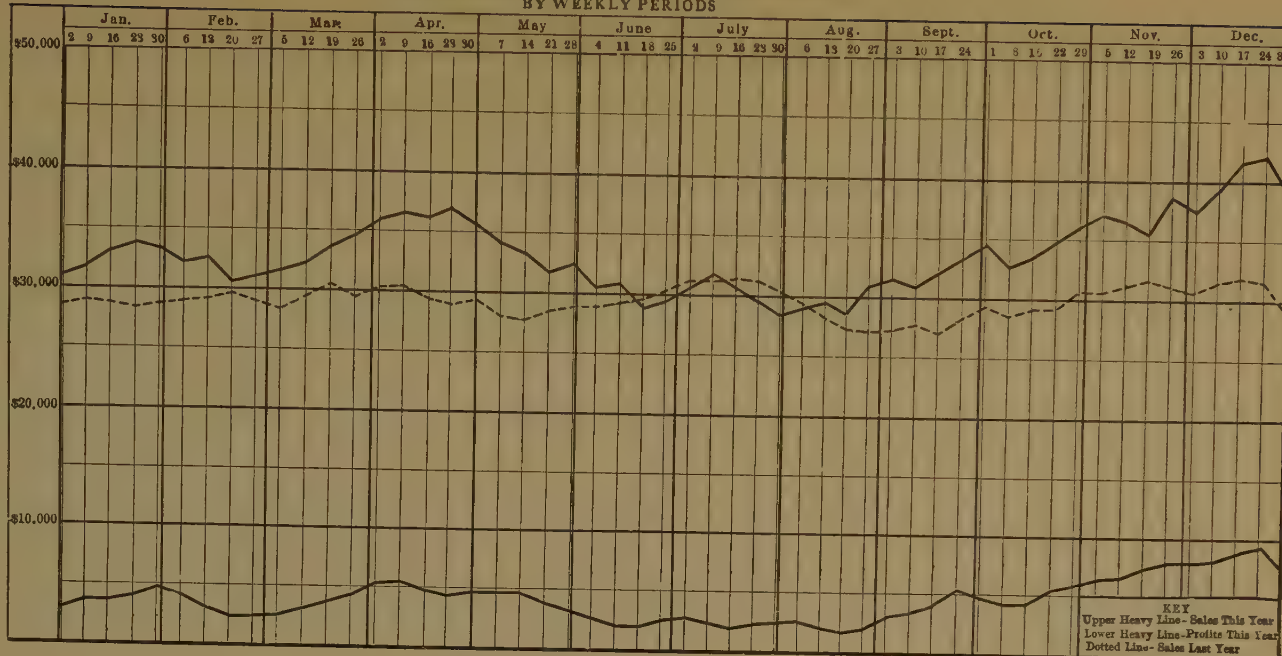


Fig. 59.—Graph Showing Sales and Net Profits.

In the illustration above is charted the hypothetical course of gross sales and net profits by weekly periods. The upper heavy line shows the amount of sales for each week of the current year, while the dotted line shows the amount of sales for the corresponding week of the previous year. The amount of net profits is shown by the lower heavy line. A chart of this kind can be kept up-to-date by plotting each week the progress of the "curve." In this graphic form the information may be much more intelligible than if presented solely by means of comparative statements.

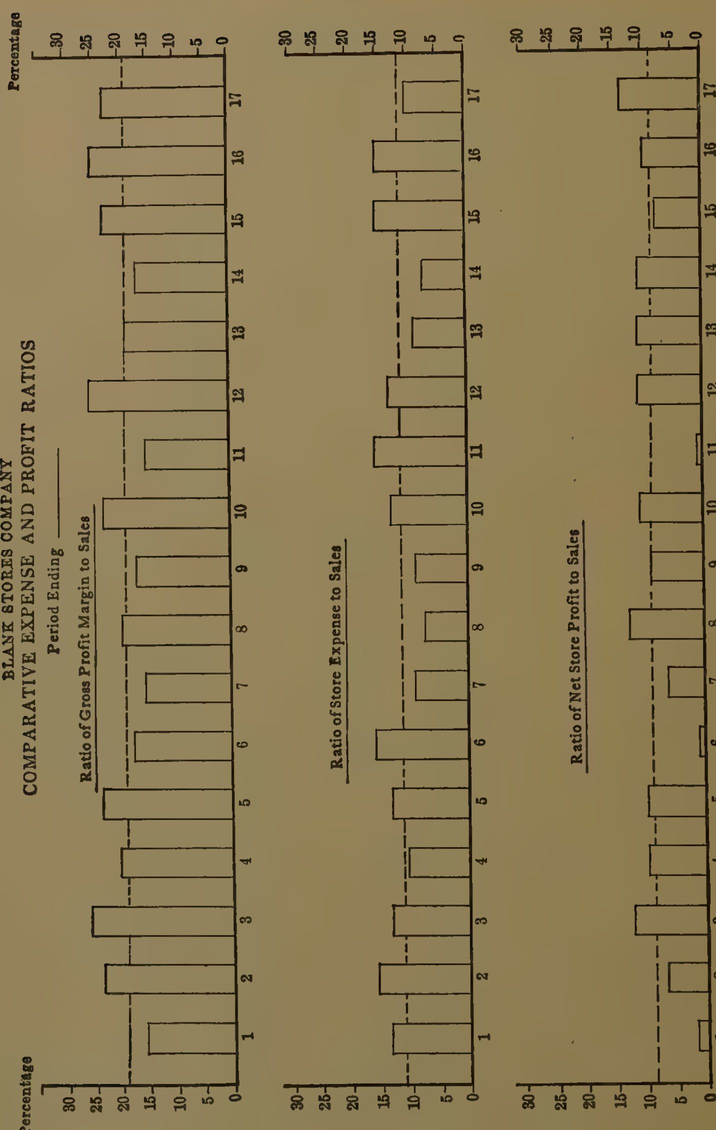

BLANK STORES COMPANY
COMPARATIVE EXPENSE AND PROFIT RATIOS
Period Ending
Ratio of Gross Profit Margin to Sales
Ratio of Store Expense to Sales
Ratio of Net Store Profit to Sales
Percentage
Percentage

FIG. 60.

the largest possible amount of goods at each call. The business-getting ability of an individual store manager and his clerks may be judged by their success along these two lines.

Another point requiring study from a comparative standpoint is the gross margin of profit realized on sales. Since all stores obtain their goods at the same cost and sell them at the same price, their margin of profit should, in theory, be substantially the same. If variations occur, another field for inquiry is suggested. If the majority of the stores in selling their goods show a gross profit margin of 25 per cent, any one store which appears to be making only 15 per cent could be called upon for an explanation. This question of gross margin is so completely within the control of the general management of the chain that there is every reason to count on a certain standard performance from each retail store.

The matter of expense ratios has already been referred to in the preceding chapter. At this point again the general office may easily establish a check on the efficiency of the store managers. For purposes of analysis the operating expenses of the stores should be divided into two groups—those fixed by the general managerial policy (like rent, advertising, etc.), and those within the control of the store manager (like store supplies consumed, merchandise losses, and probably clerk hire). This does not mean, of course, that the aggregate amount of the latter class of expenses is within the control of the manager, but he may well be held chiefly responsible for their relation to gross sales—the percentage of revenues, in other words, which must be used for operating expenses of the sort mentioned.

The general office also has a problem to consider in the relationship of rentals and other fixed charges to sales. If the rent takes away too large a proportion of the sales revenues, it would seem to argue that the location leased is a relatively expensive and therefore undesirable one. Statistics furnish here an invaluable guide in selecting locations for new stores, whose rental must not exceed the proper percentage of their anticipated sales volume.

Fig. 60.—Graphic Analysis of Expense and Profit Ratios.

In this illustration are presented graphically the comparative ratios to sales of gross profit margins, store expense, and net store profit for a chain of 17 units. The height of the columns depends not on the amounts involved but on the relationship of the items mentioned to sales of the store; for example, a small *amount* of expense might represent a relatively large proportion of sales. While the figure indicates little as to the *volume* of business or profits, it provides a valuable index of the operating efficiency of the different stores. The dotted line represents the average for all stores and it can be seen at a glance whether any individual unit is above or below this average.

These various analyses of retail store performance involve presentation of the results in somewhat different form from that suggested for the operating statement. In this matter also the character of the business will play a large part in determining how the presentation is to be made. In most cases, however, there is probably nothing which so clearly brings out relations and tendencies as a graphic chart. Such a chart has the advantage of being not only easy to read but also comparatively easy to prepare. Two illustrations of such charts are given in Figs. 59 and 60. They are largely self-explanatory. The accountant can chart the results of each period with little difficulty and may by so doing bring before the management numerous points of interest and importance which might otherwise escape attention.

Performance of Managers and Clerks.—A problem which is coming more and more to the fore in the conduct of chain store enterprises is that of measuring the performance of the selling force—not only the store manager but also the clerks under him. It is widely realized that a weak point of the chain store is its lack of personal contact with its customers, and the sometimes accompanying lack of success in establishing a uniform policy on the part of all the individuals who represent the business.

Where a careful analysis is made of the results achieved by each store, there may be some measure of its relative success or failure, but even with such information at hand it is not always possible to fix the responsibility. The manager may be held generally accountable; he will receive the credit if the store does well and get the blame if it does badly. The standards of judgment, however, are not so precise as to tell the whole story. Moreover, the success of a manager may be due to capable subordinates, who are unlikely to share properly in the credit attaching to the successful conduct of the store.

If the number of such clerks is large, the problem becomes of increased importance. These clerks represent the business in its dealings with customers. The management can make the desired approach to the customer only through these clerks. Unless they are intelligent, industrious, and obliging, the management risks not only the loss of possible sales within one store, but also the creation of a unfavorable impression of the chain as a whole. On the other hand, it is from the ranks of efficient and capable clerks that the store is most likely to recruit good managers for new stores. Unless something is known about these

clerks, this source of executive material is not being adequately developed.

For these obvious reasons the chain enterprise may well desire to supplement its statistics along other lines with some data regarding performance of its salespeople. Such information it is the province of the accounting department to furnish. The standards by which the performance of the clerk is judged and the means of obtaining the information are various. There can be indicated here only a few of the more common ones.

The first and simplest measure of a salesman's ability is the gross amount of the sales he makes. Where sales slips are in use and every article sold is recorded in one of these slips they furnish a means of obtaining the total business done by each clerk. In many lines this is the only feasible plan for getting all the data required. The sales slip can be made to tell other things of interest regarding the work of the clerk, as will be noted in a moment.

Where sales slips are not in use, however, about the only remaining source of information on the point mentioned is the cash register. Many cash registers are designed with a special key and dial for each salesman. The register then records not only the total sales for the day but also the total sales of each clerk. In some cases each clerk has his own cash drawer as well. This furnishes another check on the results.

Obviously, this standard of judgment has its limitations. There may be circumstances within the store which inevitably bring about larger sales for one clerk than for others. If, however, each clerk has one department of the store to handle, some measure of the relative efficiency of the different salespeople can be obtained by shifting the clerks about. Again, if a new clerk takes the place of an old one and his average sales are soon shown to be either materially more or materially less than those of his predecesors, some indication is given as to the use he is making of his opportunities. The average sale per customer of each clerk and the number of customers waited on by each clerk during the day may easily be picked up at the same time the other information is gathered, and these facts too are informative.

In some types of business it may be feasible to carry the analysis of the clerk's performance much farther. In a store handling a considerable variety of goods some classes of the mer-

chandise are known to be easily sold, while others require intelligent salesmanship. The sales of an individual in each class of goods may indicate whether he is actually putting forth some constructive selling effort or merely "taking orders." Some stores make it an object to the customer to buy several articles of a given kind at one time; a 10-cent article, for example, may be sold three for 25 cents. Clerks may be urged to feature these reduced prices to secure a larger volume of business, and the number of such sales that they make may also be taken as a measure of their successful selling effort.

Various uses may be made of the data thus gained in regard to the performance of the sales force. In some concerns bonuses are paid to those who demonstrate efficiency. This is notably true in the case of store managers. The amount of the bonus and the manner in which it is calculated are not primarily important here, but it may be said that all of the factors entering into the success or failure of a store should be given weight. The more important of these quickly come to mind: the relationship of total sales volume to the quota estimated by the management for the particular store; the number of customers served and the average sale per customer; the gross margin of profit shown by the store; the ratio of controllable store operating expenses to gross sales; the rate of turnover of the store inventory; and possibly the general appearance and condition of the store as reported by the inspector or district manager.

Bonuses for sales clerks are more difficult to fix. Total sales alone is usually not a satisfactory basis. Where the sales are analyzed, a bonus may be given for selling certain types of goods—those with a larger profit margin, or those which the store has found it hard to move. Where the figures are not too difficult to get, a bonus is sometimes based on the average sale per customer—those clerks exceeding a certain standard receiving additional compensation.

A direct bonus payment is not the only means of securing efficiency from the sales force. Some concerns have a plan of rating employees, the rating being based on a number of factors of the sort just mentioned. All clerks must reach a standard rating if they are to remain in the company's employ. Those who constantly fall behind are judged to be undesirable as members of the sales force. On the other hand, a contest is conducted in which the names of the clerks of the highest rating are announced each

week or month, and some form of premium or reward is given at stated periods.

Obviously, an efficient clerk may be rewarded by promotion to more responsible duties as well as by a direct bonus. Most of the larger chain enterprises take the position that they can best fill the higher executive positions in their concerns by drawing from the ranks of the store employees. Even a rather elaborate method of collecting statistics on the performance of these employees may be justified if it will furnish a means of securing for the concern competent store managers and experienced, capable general executives.

CHAPTER XVII

PROBLEMS OF VARIOUS CHAIN STORE TYPES

When an examination is made of the accounting problems of a particular chain of stores it will be found always that in certain respects these problems are similar to those of all chains, but that in certain other respects they are peculiar to the individual circumstances and character of the enterprise concerned. It is obvious that no single system of accounts can be devised which will satisfy all circumstances or meet all needs. On the other hand, some of the more important features of the accounting methods will necessarily be similar, if not identical, in the case of practically all concerns.

It has been the purpose of the preceding chapters of this book to bring out the points of similarity and to indicate how certain general principles may be applied to the operations of these enterprises, regardless of their size and character or the type of commodity in which they deal. There is little of the material presented in these chapters which is not applicable to the great majority of such concerns. It has been the purpose to exclude as far as possible explanations and suggestions of limited scope. It is expected that the executive or accountant making use of this information will be able to adapt the methods and forms presented to his own particular problem, without encountering in them peculiarities so pronounced as to render the material entirely unsuitable for his purpose.

It is a natural presumption, however, that a man engaged in a given line of work will be interested not only in a discussion of general principles and basic methods but also in some specific recommendations as to the use of these methods in his own particular business. It is apparent when the question of individual problems is raised that all such questions could not possibly be covered in a single book such as this, but there can be presented at least the outline of the outstanding problems peculiar to the more common types of chain store enterprise. An endeavor will be made in this chapter to survey the field

briefly and furnish some indication of the difficulties likely to be encountered in various lines.

Classifications by Type of Business.—If the field is to be divided according to types of enterprise it will be found that there are two possible lines of classification. The first of these is dependent on the size and complexity of the business. The second is dependent on the type of commodity handled by the stores. Concerns of different size and extent require different methods, and concerns handling varying types of commodity also have their own individual problems.

The differences in method arising from differences in size and complexity have been discussed at some length in the preceding chapters. In certain parts of the work the matter of size makes no difference in the methods employed. In other connections—notably in merchandise control methods, the design and arrangement of the general office journals and ledgers, and the preparation of financial and operating statements—there will be important variations due to the extent and complexity of the business. It will be seen, for example, that the accounting system for a concern having 25 retail stores, a central warehouse, and a factory will have a greater number of complications than will be present in a simple enterprise consisting of half a dozen retail stores, a small head office located in one of them, and no collateral or subsidiary activities.

The problems due to size and complexity of the business usually come upon the enterprise gradually. Most chains start out in a small way—possibly with two or three stores. As additional stores are opened, the need for more centralized facilities and the advantage to be gained therefrom increase as the business grows. It is important, as indicated again in Chap. XIX, to maintain in operation a system which can be readily expanded to meet the needs of a growing business. Growth and expansion are characteristic of the chain store field. The methods described in the earlier portions of this book have been developed with the idea of providing for potential expansion to take care of any changes in the business which may reasonably be anticipated.

The differences due to type of commodity handled are of another nature. In general, the problems involve a distinction between different lines of merchandising activities which are common to all the concerns in the particular line, regardless of their size or the manner in which they conduct their

operations. The grocery chain, for example, obviously has certain peculiarities which are not found in the clothing store chain. It may clarify the recommendations previously made to present briefly a number of these problems.

Selecting the lines of activity to be discussed brings out the fact of the ever widening field of chain store activity. Not very many years ago the lines of business in which chain stores engaged were comparatively few. Combinations of stores in a number of new lines now appear on the scene every year, and it is probable that attention could be given to practically the entire retail field without stepping much outside the territory covered by chain enterprises.

There are certain lines of activity, however, where the chains are more firmly established than in others, and a number of these are sufficiently typical to provide a good conception of the problems of the entire field. Chains handling food products, for example, occupy a prominent place, and the characteristics of a few types are illustrative of almost all such lines. The grocery store, for example, furnishes one set of problems, the meat market another, and those semi-manufacturing enterprises, like the bakery, the candy shop, etc., furnish a third illustration. The restaurant or cafeteria might conceivably be in this same class, although their products are sold under somewhat different circumstances.

Another class of enterprise is that dealing in novelty and variety merchandise, usually of small value and relatively small price. The 5- and 10-cent store chains furnish a good example of this line and they are closely followed by the drug stores, many of which have characteristics of miniature department stores. Clothing and furnishing establishments furnish another section of the field; all of them have similar characteristics, whether they deal in hats, shirts, shoes, or other articles of apparel. Still another subdivision of the field might be set aside for those enterprises previously referred to as selling a personal service rather than a commodity—barber shops, shoe repair shops, laundries, beauty parlors, and other establishments of a similar nature.

It is not pretended that this list covers the entire field. Certain chain enterprises will be found which bear no particular resemblance to any of the types indicated above. A very large proportion of chain store business, however, is done in the lines

mentioned, and some one of them will be found typical of most retail business which can be controlled and analyzed by means of the chain store methods heretofore suggested.

Grocery Store Chains.—The grocery store which forms a part of a chain enterprise differs in many respects from the business which was known as a grocery a generation ago. Most such concerns today confine their merchandise lines to dry groceries and staple commodities, with a limited supply of perishable goods, such as butter, eggs, milk, and citrus fruits. Most of them sell for cash only and few make deliveries. The effort has been made to eliminate the three big sources of loss which the individual retail grocery has always had to face—spoilage of perishable goods, delivery expenses, and bad debts of customers.

The result has been to offer the public a certain type of goods in standardized form at relatively cheaper prices than could previously be maintained. With the frills and trimmings eliminated, the store has been condensed to a thoroughly compact, effective retail distribution agency with a comparatively small stock of goods, a rapid turnover, low operating expense, and consequently narrow profit margins. Competition in the business is keen and the utmost in intelligent, well-informed management has been necessary to enable a concern in this line to maintain its place.

The chief problems of grocery store chains—like those of almost all the chains—have to do with merchandise control. Merchandise control cannot be exercised without some measurement of goods bought, sold, and on hand. To measure goods sold accurately, it is practically essential to know the identity of the items changing hands. A detailed analysis of sales, in other words, would be required to inform the management exactly how the stock of a given store stood at any particular time. Such a detailed analysis in a grocery store chain is a practical impossibility.

The customer of the chain grocery store buys a number of small items at one time, pays for them in a single sum, and requires to be waited on with a minimum of lost time and motion. The clerk has no spare minutes for writing down a description of every item disposed of, even supposing that the head office could profitably make analyses of the sales slips if they were prepared. To maintain a control record, then, the accountant must evolve some other plan for obtaining the data.

To meet the needs of the management along this line, there has been devised the plan of carrying store inventories at retail prices. This has been described in detail in Chap. VIII and needs little further comment here. The essentials of success for this method, as indicated in the chapter referred to, are that the goods be mainly packaged or sold in the same form as delivered to the store, that retail prices be known and reasonably constant on most articles, and that there be no large element of merchandise shrinkage, spoilage, or similar loss. The retail grocery meets these requirements and the retail price of inventory method is widely used in such concerns.

Under such a plan physical inventories may be taken at any time and on the same basis that the book inventories are carried. For control purposes, the goods in the store may be priced at the retail figures. Where the information is wanted in a hurry and the total value of the stock on hand is the only question at issue, an inventory may be taken without even listing the names of the items involved. The inventory takers will simply set down: "So many units at 10 cents, so many units at 8 cents, so many units at 13 cents, etc." If the total checks out with the book figure, the condition of the stock is taken to be correct. It is apparent that such a rough calculation serves merely to check the total value and is of little service for purposes of merchandise analysis. For operating statement purposes, the total retail value must naturally be reduced to the corresponding cost figure if the concern is to avoid anticipating a profit on goods not yet sold.

The question of turnover in the retail store is usually less serious than in most retail lines. The more closely the concern confines its stocks to standard articles and brands, the less likelihood there is of any store becoming oversupplied with unsalable goods. Rates of turnover of the store as a whole may be calculated by the head office according to the methods indicated in Chap. XVI; as far as individual articles are concerned, an experienced district manager on a periodic trip of inspection is likely to discover the fact if any store has an excessive supply of slow-moving goods.

If the retail stores are permitted to handle perishable goods—such as fresh fruits, vegetables, and the like—some modification of the merchandise control methods must be put into effect. Usually in such cases, the store manager buys these "green"

goods direct from farmers or commission merchants, sets his own retail prices, and does what he can with the lot. There is likely to be a large element of spoilage, which under the ordinary method of carrying perpetual inventories at retail prices will not be satisfactorily taken into account. Either the store merchandise account on the head office books must be adjusted to take care of this spoilage element, or else the transactions in such goods must be kept separate from the ordinary stock all the way through. The latter course is made difficult by the fact that these goods are usually sold along with others and the total sale is rung up on the register as a single transaction, without any distinction between the types of product. If this can be avoided—either by having a separate register key and dial for the perishable goods or by having a separate cash register altogether for recording such sales—this portion of the business can be treated independently and without interference in the general scheme of merchandise control. If this is impossible, the quantity of goods spoiled or sold at less than the standard price must be reported to the head office so that the perpetual inventory accounts may be corrected.

The average grocery chain of any considerable size has a central warehouse, where staple commodities are kept in stock. Practically all dry groceries and package goods are obtained by the stores through this warehouse. The methods of merchandise handling and accounting outlined in Chap. VII will, therefore, apply to the bulk of the stock. It usually happens, however, that there are some semi-perishable commodities dealt in and these are likely to be bought by and delivered to the individual stores direct. Examples of such commodities are milk, butter, eggs, bread, and crackers. Another modification of the general accounting scheme is required to provide for these items.

Normally, many of these articles are delivered daily to the retail stores without the issuance of any formal written order for the goods. There is simply a general understanding between the seller of the goods and the chain that these commodities will be furnished to the stores in such quantities as they require and that they will be paid for weekly or monthly by the head office on presentation of a statement. It should be required in such cases that the store manager prepare a list on a prescribed form of the quantities received from each concern, and that he forward this list to the head office at intervals corresponding with the agreed

dates of payments of the invoices. Such a list will constitute a receiving report the purpose of which would be practically the same as that of the form illustrated in Fig. 14, although it might well be ruled up in a different way. On receiving the vendor's invoice, the head office accounting department will match it up with the store manager's report in the usual manner and charge the store merchandise accounts with the proper sums.

In certain cases the store manager is permitted to pay cash for these goods at the time they are delivered. This is particularly true of items bought from farmers and others who customarily sell only for cash. When purchases are made in this way, the store manager must explain his expenditures in his daily report, supporting them with the proper vouchers. The head office will charge the amounts to his merchandise account, either through the form provided to record deductions from cash receipts (see Fig. 5), or by a regular check drawn to reimburse his store cash fund.

The expenses of a retail grocery store are usually classified along standard lines and for the most part are similar to those of other retail stores. Where any sort of perishable goods are handled there will be an item of "Refrigeration Expense," which is usually of sufficient size to entitle it to a separate subaccount. Many retail grocery stores also use considerable advertising matter—price cards, special announcements, window display material, etc. Where the cost of this advertising is considerable, a separate subaccount among the store expenses may be set aside to record it. General newspaper advertising is, of course, charged as an item of the general overhead expense of the chain as a whole and apportioned to or distributed among the various retail stores according to the methods suggested in Chap. IX.

The number of clerks employed in the chain grocery is usually small. In many cases the store manager does the bulk of the work, with one full-time assistant and possibly a part-time helper or two for rush periods. Performance of the manager is closely watched, promotions to more responsible positions usually coming from this grade of employee. Particular stress is laid on the relation of controllable expenses to gross sales, and to the prevention of any merchandise losses through spoilage, waste, or theft. The history of the operations of the store is usually an account of the capability and efficiency of its manager and is so interpreted.

Meat Market Chains.—Many of the factors which have brought outstanding success to grocery store chains are found to exist also in a business of retailing meat products. There is a large and reasonably steady volume of business in these household commodities of constant and universal demand. The type of goods handled tends to be standardized and a good store in a good locality may be able to forecast with reasonable accuracy what the requirements of its neighborhood from week to week will be. The stock carried need not be great, since fresh supplies of most items can be secured quickly when needed. Volume of business is relatively large, turnover is rapid, expenses low, and margin of profits fairly steady, if relatively narrow.

In some respects, however, the business of retailing meat products is very different from that of retailing dry groceries. From the accounting standpoint the character of the merchandise handled is altogether different. The element of conversion of merchandise from one form into another enters into the calculations of the accountant, and this, together with certain other factors, renders merchandise control very difficult. This difficulty, and the greater personal experience and skill required of the manager and employees, may account in part for the fact that the chain stores do not as yet play so large a part in the meat market field as they do in the grocery field.

The difficulty of merchandise control in a chain of meat markets arises largely from the circumstances attending the purchase and resale of meat products, especially fresh meats. The meat market manager buys beef, lamb, and veal largely as a whole or part carcass, not in the form of the individual cuts which he sells to the public. A side of beef is converted in the shop into various steaks, rounds, soup bones, and what not. All the different cuts sell at different prices and these prices vary constantly. It is impossible to express the value of a given cut in terms of the cost, because the cost has previously been figured in terms of the carcass as a whole. The price of the side of beef to the butcher may have been 14 cents a pound, while the retail price of the cuts which he sells may vary on the same lot from 3 to 30 cents. The wholesale price of beef changes constantly and retail prices are responsive to these changes, public opinion to the contrary notwithstanding. Where there is a continuous process of buying and selling of different lots of goods in the shop at the same time, it is impossible to determine how much was realized from the

sale of a given carcass, or even how much the concern might expect to have realized, because of the fluctuating prices.

It is apparent that no such method of perpetual inventories at retail prices as was recommended in the case of grocery stores can be used satisfactorily in a meat market chain—certainly not without undergoing substantial modification. Even if it were possible to convert the cost of the goods purchased into terms of retail prices at the time they are delivered to the stores, the element of mark-ups and mark-downs would entail so much labor as to make the scheme impractical. Neither is it feasible to try to identify the goods sold in terms of their origin (by means of sales slips), for the same reasons that apply in the case of the grocery store. The result is an almost total absence of merchandise control in the ordinary sense of the term.

There is fortunately another factor entering into the retail meat business which in part offsets the difficulties just noted. Meat products turn over very rapidly. A well-managed retail meat market may turn its stock of fresh meats as rapidly as twice a week and even such smoked meat products as ham, bacon, etc. are sold off promptly. The normal inventory of such a shop is very small in relation to its volume of business and the changes in the amount of this inventory from period to period are yet smaller. As a result, the inventory plays little part in the preparation of a statement of operating results and in the majority of cases the record of a given store may be judged with reasonable accuracy simply from a comparison of its purchases and sales.

This circumstance makes possible a very close check on the operations of each store, even without the ordinary means of merchandise control. In the course of a month (or four-week period) the entire stock of the meat market will very likely be turned over as many as four or five times. The relation of the inventory to the volume of sales is, therefore, only as 1 to 4 or 5, and the effect of any probable variation in the inventory may well be not more than 1 to 25. No material error is, therefore, likely to occur if the store's purchases of a four-week period are treated as the cost of goods sold for the period for comparison with the sales revenues. If the normal mark-up is such as to yield a given percentage of profit, the results are obviously out of line if something close to this percentage of profit is not maintained.

Some qualification of this general statement is, of course, required. In making comparisons in the manner indicated, the

manager must bear in mind all the factors entering into the situation. Where retail prices vary as wholesale prices change, there is always the possibility of an exceptional situation being created by some violent fluctuation in wholesale costs. Even with the rapid turnover obtained in a retail meat market, there will be some loss resulting from reduction of retail prices to correspond with a steadily declining wholesale market. On the other hand, an extra percentage of profit will be realized in the case of a steadily rising wholesale market. This is on the assumption that the management will make changes in the retail prices promptly. It is possible, of course, that the situation may be reversed if the store continues to sell at a low retail price goods which are being replaced at a constantly increasing figure. In a chain enterprise, with the merchandise manager constantly in touch with the trend of the market, the presumption is that the retail prices will be fixed with intelligent regard for the general situation.

The element of waste and spoilage is apt to run relatively high in the retail meat business. Fresh meat deteriorates rapidly and the store manager must constantly guard against loss through spoiled goods. The demands of his particular trade, moreover, may result in losses through waste of certain parts and cuts, due to his inability to dispose of them to his regular customers. Such a situation provides an opportunity for the merchandise manager to make a special feature of slow-moving goods and thus render them salable. Here again an absentee management—such as exists in chain enterprises—is at a disadvantage compared with the proprietor who is on the ground. From an accounting standpoint it is important to provide some means for notifying the head office of losses due to waste and spoilage and the store manager should be obliged to render a report covering this subject. The obvious difficulties in the way of getting an accurate statement of the facts, however, makes such a report in many cases of dubious value.

When there is any question about the results in a given store, the head office can do very little except send one of its own representatives to be present continuously in the store until the source of the difficulty is located. If the management has any sort of reliable records to use as a basis of comparison, any store that is obviously out of line can be detected. A supervisor or inspector from the head office should be able in a short

time to learn whether the difficulty is due to dishonesty or inefficiency.

If there is a possibility that the discrepancy in the results is due to greater differences and variations in the inventory than have been expected, a physical count of the goods can be taken in a short time at the close of any business day. The practice in valuing such inventories is to use the current market wholesale cost of the particular part or cuts, regardless of whether the item value was bought at that price or in its present form. When inventories are taken, the work is usually done between Saturday's and Monday's business, the week being the basic accounting period in the meat business.

Meat markets are often combined with groceries or other retail establishments. Frequently, they are found in conjunction with fresh fruit and vegetable markets. In practically every case, however, the meat product business is carried on independent of the other lines of activity and the different lines practically constitute separate enterprises. If both parts of the store are under the same management the cash sales and merchandise accounts are kept independent, along with certain of the direct expenses; the remaining expenses are apportioned between the two departments on some equitable basis. In case the meat market is operated without any relation to the remainder of the store, its position is simply that of any tenant in a rented property, and its accounts are kept without any reference to the fact that another retail enterprise occupies part of the same quarters.

In those cases where the meat market handles a small quantity of bottled and canned goods in addition to its regular stock, the merchandise control problem takes another turn. It may be necessary to divide the store merchandise account into two parts, carrying the meat products according to the methods suggested above, while maintaining a different type of record for the grocery items. The number of complications which may arise in this connection is almost unlimited and becomes very troublesome to handle. Practically the only thing that can be done is to separate the sales of the different types of product by means of different cash registers in the store, and to keep the purchases similarly separated in order to check each merchandise division independent of the other. It is apparent that no satisfactory means of control can be adopted to cover in one account a merchandise stock comprising such items as fresh fruits and vege-

tables, dry groceries, canned goods, meat products, milk, and butter. Separation into groups of similar characteristics is necessary to intelligent control.

Expenses of operating the meat market are relatively not very heavy, although they include some additional items not found in the ordinary grocery establishment. Refrigeration expense becomes a large item of cost, as practically all the meat products must be kept at a low temperature. A larger relative investment in fixtures and store equipment is required; show cases, scales, tools, and coolers are examples of the more expensive equipment. Many markets also have their own refrigerating plants instead of buying ice; depreciation on this fixed equipment must not be neglected in calculating operating expenses. Loss through spoilage and waste may consitute a substantial charge against profits unless carefully held down to a minimum. Wages and rent are the largest items of store expense and their proportion does not differ greatly from that usual in the grocery business.

Due to the nature of the product handled there will usually be no central warehouse in connection with a meat market chain. Goods may be bought for all markets by a single buyer, who places orders for the entire chain, but in many cases the individual store manager is permitted to buy his own goods and sometimes to set his own prices. Neither situation, however, entails any substantial modification of the purchase records suggested in Chaps. V and VI. The packing houses normally furnish invoices promptly, usually sending them direct to the store. These can be approved for payment by the store manager and sent into the head office immediately for settlement at the agreed time. The invoice itself may serve as a receiving report, the store manager merely checking the quantities and prices and forwarding the bill to the head office accounting department.

Bakeries, Confectioneries, Etc.—Another type of retail store dealing in food products is the concern which buys raw materials, converts them into a manufactured product, and sells them in that form. In this class fall bakeries, candy shops, and possibly also soda fountains and restaurants. Since the latter have some special characteristics they are discussed separately. The bakery, the confectionery store, and establishments of like kind have many problems in common.

In concerns of this character there are really two processes taking place. The first is the conversion or manufacturing of the product; the second is the retailing or selling of this product to the consumer. Properly speaking, the costs and expenses of each of the two processes should be considered separately. In other words, the cost of the product should be first determined and then the operation of selling it should be taken up as an independent process.

As a practical proposition this often proves impossible. Whether or not the distinction between the two processes can be made usually depends on whether the manufacturing is done at the retail establishment or whether the concern operates a single factory and simply distributes its goods through a number of retail agencies. In the case of the "window bakeries," for example, the manufacturing and selling processes are so intermingled as to make a separation practically an impossibility, while on the other hand, in the case of a concern manufacturing bakery goods at a central factory and distributing them daily to its outlying retail stores there is no difficulty involved in making the separation.

Where the two processes are inseparable from an accounting standpoint the difficulties of merchandise control are again rendered very troublesome. Here the stores are purchasing one article and selling another. The proper relationship between the two can be determined only from a thorough knowledge of the amounts of various types of raw material used and a comprehensive report of the goods produced each day. The amount of accounting involved to secure a good internal check is probably more than the average concern of this character is willing to undertake. It may, however, be entirely feasible, an outline of the procedure being suggested below.

The bakery may be used as an example; similar methods can be utilized in candy shops and other establishments of like nature. In a given bakery 20 or 30 different products may be made, each of which is standard in size and formula. From recipes and tests the management knows what raw materials are required for each product. It then becomes necessary only to know the quantity of each type of product made up in a given period in order to determine whether raw materials supplied to the store have been properly accounted for or not.

To carry out this idea the store manager will prepare a daily report of the number of loaves of bread, rolls, cakes, etc. made, the number sold, the number carried over, and the number destroyed as stale or unsalable. Figures representing the quantities sold need not be taken from reports of the actual sales, but may be arrived at by taking the number produced during the day and adjusting it for the number carried over (both at the beginning and end of the day) and the number destroyed. From this report the head office can determine the proper consumption of raw materials (based on the quantities produced) and also the correct amount of cash to be accounted for (based on the quantities sold, at known prices).

By this means a complete system of internal check on the merchandise is provided. Such a report has the additional advantage of revealing the extent of loss due to spoilage. Bakery goods become stale very quickly and production must be carefully regulated in accordance with the demand. In the ideal situation the entire stock of the bakery will be completely sold out every evening.

Raw materials will very likely be purchased in considerable quantities and stored in a central warehouse. They will be ordered out and delivered to the retail stores as required and will be accounted for according to substantially the procedure outlined in Chap. VII. Perishable goods like milk and butter may be purchased direct, in which case the differences in the accounting methods will be similar to those described above in connection with the grocery store chains carrying like goods.

One distinction to be noted in this connection is that having to do with the determination of gross margin of profit. If a gross margin figure is arrived at in such a business as this simply by comparing the cost of raw materials used with the revenues received from the sale of the finished product, the amount will represent something different from the gross margin on the sale of goods bought in a finished state. This difference can be eliminated if the manufactured cost of the product can be found and compared with the sales revenue.

To find this manufactured cost in a bakery of the sort considered, it would be necessary to add to the cost of raw material such portion of the store expenses as may properly be considered costs of manufacture. This would include heat for the ovens, repairs and depreciation of the baking equipment, wages of

employees while engaged in mixing, baking, etc., also a proportion of the other expenses of the store, such as rent, light, insurance, taxes, etc. It is apparent that a good deal of this expense apportionment may have to be made on a more or less arbitrary basis. Very likely it would be impractical to attempt to make the separation in the actual ledger accounts. Under ordinary circumstances it is probable that a single set of ledger accounts would be maintained and that any apportionment of various expense subclassifications as between manufacturing and selling would be made simply in a report or operating statement, which would show clearly the total expense and the proportion charged to each process.

When the chain operates a separate manufacturing plant, the situation, so far as the retail store is concerned, is entirely different. Since no manufacturing is done in the stores, they assume most of the same characteristics that are found in retail groceries and meat markets. Goods are charged from the factory to the store merchandise accounts in the same manner that groceries are charged from a central warehouse to the retail stores. The problems of merchandise control within the stores, expense classifications, etc. cease to present any peculiarities.

Accounting for the operations of the manufacturing plant is another problem altogether. No attempt has been made in this book to enter into the complexities of factory accounting. The cost of product manufactured will presumably be arrived at by some recognized method, and the only remaining problem related to factory operations is the question of the value placed on the product when it is transferred from the plant to the stores. The company has the option of continuing to carry the goods to its merchandise accounts at cost, or of pricing them at some figure representing their estimated factory sale values. If the first method is adopted, the factory will show no profit, but will be treated simply as a subsidiary department serving the retail distribution agencies. If the second method is adopted, the factory will show one profit and the retail stores another; in other words, the total profit will be divided between the two departments of the business on the basis of what each one earns. Both methods and their respective advantages and disadvantages have been considered at some length in Chap. X.

Retail candy stores and confectionery establishments in general have problems similar to those of the bakery. Product

may be manufactured within the store or in a central factory. It is perishable and becomes valueless if not disposed of quickly. The methods adopted must provide adequate internal check on the goods, to avoid both dishonesty of employees and losses due to spoilage and waste.

Restaurants and Soda Fountains.—The restaurant field has proved a profitable one for chain enterprise. Particularly in the larger cities there have been placed in operation a very considerable number of such establishments, mainly those of the cafeteria or lunch counter type. The clear advantages of buying foodstuffs in large volume and selling them under uniform conditions at standard prices have given these concerns prominence and continue to encourage others to enter this line of activity.

One of the several advantages obtained by the restaurant chain is uniformity in equipment, service, and general procedure. This, of course, is to a certain extent an advantage of every chain enterprise, but the savings accomplished are more pronounced in the restaurant field than in most others. Equipment constitutes the principal item of investment in the case of a restaurant. By standardizing it, together with arrangement of facilities, the restaurant chains have accomplished considerable economy, and also have broadened their appeal to the public through offering service of a uniform type in all the units of their enterprise.

Problems of merchandise control in a restaurant chain are similar to those in a chain of meat markets; also in some respects to those of the bakeries and confectionery stores. The commodities handled are highly perishable and likely to be wasted unless there is efficient management. On the other hand, the turnover is very rapid and the supply of goods on hand in the individual restaurant almost negligible. Gross profits can be roughly determined, therefore, by reference to purchases and sales, without much regard for quantities carried over. Through such comparisons the general management can keep closely in touch with the operations of each unit, even where detailed analysis of goods sold may be impossible.

The element of conversion or manufacturing is present, as in the case of the bakery. In the restaurant, however, there is no clear distinction between the manufacturing process and any other process. The employees of the restaurant are not only selling a commodity but also furnishing a service, and it would be futile as well as unnecessary to endeavor to separate the differ-

ent portions of the service. Probably it will be sufficient to subdivide the wages expense account as between cooks, counter employees, bus boys, dishwashers, etc. The other expenses of the establishment need not be subdivided along these lines, since the service of the restaurant may be viewed as a whole. There will, however, be a larger number of different expenses than are met in the ordinary retail store and for that reason a greater number of expense subaccounts will be required.

Aside from the item of wages the larger items of expense in a restaurant pertain to the use of facilities. As previously mentioned, there is a heavy investment in equipment, which carries its load of insurance, taxes, and depreciation. Replacements of equipment are heavy. Breakage and wear and tear go on at a rapid rate, requiring either large depreciation allowances or a very conservative policy in charging off renewals to expense. When a concern in this type of business figures low depreciation rates and then sets up all new equipment bought as a capital asset, it is shutting its eyes to its heaviest expenses. Unless a very large expansion in facilities is taking place, almost all items of dishes, linens, silver, kitchen utensils, etc. bought after the first year of operations are likely to represent no actual addition to the amount invested in the property, but rather an expense of continuing operation. This may apply also to tables, chairs, counters, and the larger items of equipment; all of them wear out rapidly and must be charged off if the facts of operation are not to be obscured.

Heat and refrigeration are other large items of restaurant expense. Where mechanical appliances are used for preparing food, washing dishes, and similar services the cost of power may come to be considerable.

Two large sources of loss in restaurant operation are dishonesty and inefficiency. In the handling of merchandise and cash this, of course, may be said to be true of almost every retail enterprise, but in the restaurant business the opportunities for such losses are more frequent and the amounts involved greater than in most types of business. It is difficult to accomplish any internal check through the accounting system alone. A vigilant, experienced manager of integrity is a prime requisite. Without responsible supervision of the individual units in the chain, the head office will find it difficult to prevent theft of food, and also equipment, collusion between employees and customers to obtain goods at

false prices, flagrant cases of waste and spoilage, and enough other leaks to sink the ship in short order.

In a large chain of restaurants a central warehouse plays a prominent part. Whereas in most chains the individual units buy much of their perishable stock direct, in a highly organized chain of restaurants practically nothing will be purchased direct but all goods will be supplied to the retail establishments from the warehouse. Since practically all of the merchandise handled is perishable, the goods will not be carried on hand in the warehouse for any great length of time, but it will serve as a central distributing point. One great advantage in this business lies in buying large quantities at the lowest obtainable prices and this is not to be sacrificed by permitting any goods to be purchased in small lots.

A cold storage warehouse may be required by the concern. This, of course, entails a heavy investment and considerable operating expense. The warehouse and delivery costs may run up to such an amount that it is desirable to distribute them to the retail establishments according to one of the plans suggested in Chap. X.

The volume and variety of business in a restaurant suggests the advantageous use of statistical analyses of various features. Test checks may be made to determine the demand for given types of article, the distribution of the demand over different hours of the day, the average amount and character of each customer's purchase, and similar items. An intelligent study of the business will lead to increased efficiency in serving the public, and in this type of business particularly, improvements in service and quality result very quickly in increased patronage and correspondingly increased profits.

The problems in connection with the operation of a soda fountain are similar to those of the restaurant. Merchandise control by means of accounting records is necessarily weak as compared with painstaking and intelligent management. Theft and wastage have to be guarded against and the high cost of facilities used in giving service requires recognition. The problem is complicated in most establishments by the fact that soda fountains are usually operated in connection with some other department—as part of a drug store or candy store, for example. When that is the case it becomes necessary to treat the soda fountain as a separate department and to subdivide the accounts so as

to obtain results for its operations which are distinct from those of the other departments. This is necessary not so much to get a satisfactory check on the fountain as to prevent the looseness of method necessary in dealing with it from interfering with an efficient check on the other commodities handled. This situation is referred to in a subsequent section in connection with the accounts of drug store chains.

It needs to be emphasized throughout this discussion of merchandise control problems that they exist in chain enterprises to a far greater extent than in the individual retail establishment. Many of these points of retail store supervision and control are taken care of satisfactorily by the proprietor of the store when he is regularly on the ground during practically the entire business day; it may be unnecessary in such cases to provide any formal means of internal check as a part of his accounting system. Where the units of a chain, however, are scattered over a broad territory, it is impossible for each unit to be kept under the direct and immediate supervision of the owner of the enterprise. He must act through agents and his methods must be so designed as to inform him—automatically whenever possible—whether these agents are operating his business as he expects it to be operated. Broad and comprehensive reports will go a long way toward accomplishing the supervision over these agents which he desires, and the fact that there are certain circumstances in which such reports still leave some control features uncovered only emphasizes their general utility and the many functions they will serve if properly designed and handled.

CHAPTER XVIII

PROBLEMS OF VARIOUS CHAIN STORE TYPES (*Continued*)

The types of chain store enterprise just considered have been those handling chiefly food products. While each type mentioned has certain peculiarities of its own it will be noted that all these stores have many characteristics in common. They make up a considerable portion of the chain store field, both in number of stores and volume of business done. There are, however, several other types of chain establishment which have attained considerable prominence and which present problems not met with in the lines previously mentioned. Among these latter, drug stores, novelty stores, clothing and furnishing stores, and personal service establishments are deserving of special mention.

Drug Store Chains.—Next to the grocery store chains the drug store chains are probably the most numerous and prominent in the field. As retailers of necessity, convenience, and novelty goods of wide popular appeal, small bulk, and comparatively low price the drug store proprietors have found it profitable to extend their business by means of establishing branch stores or combining previously independent stores into a chain. In certain respects the business is not so well adapted to chain exploitation as some of the lines previously mentioned, but the majority of the goods sold in drug stores are of such a character that they can be very well distributed by this type of retail agency.

It may, of course, be properly said at the outset that the establishment which masquerades under the title of drug store is often everything but a drug store in point of fact. Many of them have been developed to a point where they are more like small department stores than any other type of establishment. The variety of goods that is sold through these agencies is amazing. Men in this field have stated that they could sell in their stores any article sold in any retail store. The problem sometimes becomes one of keeping new lines of merchandise out instead of adding new lines which might be handled.

Unless the store is very small, it is usually divided into departments, each handling a commodity of a different type. In a fair-sized store the six following subdivisions are frequently found: candy, cigars and tobacco, soda fountain, toilet articles, prescriptions, and miscellaneous. If this classification by departments can be accomplished in the accounting records, the merchandise control problem is reduced to terms where it can be handled with a reasonable degree of success. When there is no such classification, there is usually no merchandise control entitled to the name.

The actual physical separation of the goods in the store is not so important from a record keeping standpoint as the separation of the accounting reports dealing with the merchandise. Primarily, the sales of different types of article must be separately recorded in the store. This can be done by the use of sales slips, but very often that is not practical. The separation can be accomplished by the use of a separate cash register for each department or a number of separate dials on a single register. If the total sales of each commodity can be determined by one of these methods suggested, it will be possible to make some approximation of what is being done with the merchandise delivered to the store.

If the sales are thus classified, it is apparent that the purchases (or deliveries of merchandise) must be correspondingly subdivided. This requires a degree of elaboration of the merchandise accounts and records on the head office books which is much more extended than anything discussed in detail in any of the preceding chapters. It will be necessary, for example, to divide both the sales and the merchandise ledger accounts of each store into as many parts as there are merchandise groups decided upon. This means not only that separate accounts must be carried in the ledger but also that each sales and merchandise column in any of the journal records (such as the voucher register, summary of store orders, etc.) must have corresponding subdivisions.

Since the journal forms of a large chain of stores are usually already considerably expanded, any addition to the number of columns required is likely to produce some purely mechanical complications in laying out and handling the forms. In some records, for example, where there has been suggested merely a single sheet for all stores, it may be necessary to use a separate sheet for each store, or the merchandise records may have to be further subdivided on a subsidiary sheet after the general records

have been written up. An illustration of this latter method of subdivision is given in Figs. 32 and 33, where certain voucher register rulings were presented. The same principle is, of course, applicable to other journal forms.

When this subdivision has been accomplished the initial step toward control of the merchandise operations of the store has been taken. Unfortunately, the succeeding steps are by no means as simple or as effective as could be wished. Within the product types designated, there is still a wide variety of items, differing to such an extent that it is very difficult to apply any uniform standards to all of them. Since it is usually not practical to attempt a complete description of each item sold on a sales slip, some adaptation of the retail price inventory method must be found for purposes of internal check. Usually this amounts to little more than a rough estimate of the percentage of the gross profit which should be realized on each type of goods, and the application of that percentage to sales revenues to determine cost of goods sold and resulting inventory valuations.

In the case of items like candy and cigars, fairly satisfactory results can be obtained by this method. In setting a retail price on such goods a fairly uniform mark-up will probably be used for the entire line. If this mark-up is known, the approximate cost value of the goods sold can be readily found from the sales revenue figure. Knowing the cost of goods purchased by the store and the cost value of the goods sold, the accountant can arrive at the estimated cost value of the goods remaining on hand. The actual value of those goods, determined from a physical inventory, should not differ materially from the estimated figure.

The same thing is true to a lesser extent of fountain drinks, although here the problem is complicated by elements of shrinkage, spoilage, etc. Since the goods carried at the fountain, however, turn over rapidly, the inventory plays a less important part and results can be checked promptly, as in the case of restaurants, meat markets, and other establishments having the same characteristics. It needs to be stated again that while the accounting department figures will provide a certain amount of check on the results, the store can protect itself against theft and waste only by vigilant supervision of the operations, in addition to the ordinary methods of control through the records kept.

In the case of toilet articles and miscellaneous goods, the difficulties are increased by the variety of articles handled and the

differences in retail mark-up on each type of goods. Unless the mark-up is nearly uniform within a given classification or department, it becomes almost impossible to estimate inventories or to control the merchandise through the accounting records with any degree of success. This does not mean, of course, that some sort of a rough approximation may not be made, but if the actual figures differ widely from the estimate, there can be little assurance that the result is not due to forgotten factors in the situation rather than misappropriation of cash or merchandise losses. Since it is to guard against these latter disadvantages that the control system is maintained, it is obvious that weaknesses in this respect are fundamental. The method of estimating based on a weighted average mark-up (illustrated in connection with Fig. 20) may be used in such a situation to decided advantage.

It will be evident that the methods suggested for checking results are chiefly modifications of the retail price inventory plan discussed in Chap. VIII. In any such plan frequent changes in retail price tend to impair the accuracy of the estimates and interfere with the operation of the plan. Here again the drug store finds itself in difficulties. It is very common practice—particularly in the chain stores—to run so-called "specials" one day in the week, in order to stimulate buying in an otherwise dull period. This means that certain lines of goods are marked down for a single day, the prices being restored to normal again the following morning. If the ordinary treatment of price changes were followed, this practice would entail a complete inventory of all the goods put on special sale both before and after the sale.

The volume of work entailed in such procedure would be altogether too great to be justified by the results. To avoid distortion of the estimates as a result of these special sales, it will be necessary to obtain some information as to the quantity of each item on sale which was disposed of at the reduced price. The store manager might be required to furnish at the end of the day a list showing this information. The data would be of importance to the accounting department in checking the merchandise accounts, and would also be of interest to the management as indicating the increase in business in certain lines due to special prices and special advertising.

Drug Store Inventories—Perpetual and Physical.—The drug store has other merchandise problems which cause a great deal of trouble. Theft of merchandise is common, particularly in the

case of those goods of small bulk and relatively high value, like fountain pens, kodaks, etc. Methods of display adopted make theft of such items by customers only the easier and the usual type of merchandise records furnishes no indication as to its extent.

To guard in part against undetected losses of this kind it is sometimes found desirable to establish a perpetual inventory covering the more important items of the character described. This perpetual inventory record may be kept either in the store or the head office, probably the latter. The quantities delivered to the store are known and recorded on the sheets or cards used for the inventory record. For all such items the sales clerk is obliged to make out a sales slip, and this slip is used to enter on the stock records the credits for items sold. A physical inventory of such goods can be taken at frequent intervals, and if loss is shown to be occurring, special precautions can be taken to prevent its recurrence. Sometimes a tag containing a serial identification number is attached to each such article and must be turned into the office when the article is sold. The store must account for all such tags and show the proper amount of revenue for each.

It is, of course, possible to extend this perpetual inventory idea to all the goods in the store. That is to say, a complete stock record might be kept and balanced regularly with a physical inventory. Since a large proportion of the items are of relatively small value, and since there are a multitude of them, the volume of work can hardly be justified by the results. The matter of merchandise control becomes in the chain drug store a question of piecemeal adaptation of different methods to different parts of the stock in such a way as to supply as much control as possible with a minimum of clerical labor.

Whatever methods are adopted, they must be checked from time to time by a physical inventory. Taking such a physical inventory in a large drug store is a difficult and thankless task. Many items can be counted and written down in the ordinary way, but a very large number of them are not so susceptible of measurement according to any standard plan. Goods put up in packages of known quantity can be described accordingly, but where packages have been broken or raw materials mixed or partly mixed (as in the case of medicinal preparations) it would be wholly impractical to attempt to determine the quantity or value of the goods on a basis of their cost as originally purchased.

Counting the number of pills in each bottle, for example, would be more of a task than any management would be likely to want to undertake.

The result is that quantities, and in many cases values also, are arrived at by rather rough-and-ready estimates. Frequently, the goods are set down merely at their assumed retail selling price; this selling price can, of course, usually be converted into the estimated cost by the head office in case that information is required. Where the value needs to be arrived at quickly, it is often the practice simply to group the articles according to retail prices and to omit the descriptions altogether; the inventory record then shows merely: "So many items at 10 cents each, so many items at 11 cents each," etc. The inaccuracy of such methods will be apparent, but the amount of work involved may make any other scheme wholly impractical for ordinary purposes. Doubtless a detailed physical inventory will be taken at the end of each fiscal year but most drug stores consider it useless to attempt one more frequently.

Another exceptional problem in connection with drug store inventories is due to a factor which may be called "obsolescence." In meeting the demands of the public, buyers of drugs and novelty goods have to contend with "fads" of extreme proportions. Due to advertising or some other temporary circumstance, a sudden demand may arise for a particular kind of goods, and for a week or a month sales of this item will be heavy. At the end of that time the demand suddenly ceases, and if the store is unfortunate enough to be caught with a large supply, it is questionable whether the goods can ever be sold at any price.

Avoidance of such difficulties is naturally a merchandising rather than an accounting problem. The accountant, however, is confronted with the necessity of putting a value on such goods if they are found in the inventory. How much are these items worth? At the moment there is no market for them; later on it may be possible to sell them again at a good price, while, on the other hand, they may never come into popular favor again. Conservative practice would, of course, dictate that they be eliminated from the inventory altogether, or at least written down to the minimum figure. If this is done, however, the effect of such transactions on the gross profit of the period must be recognized and allowance made for these items in estimating the inventories. If in the future the goods are sold, whatever they bring

will (from a bookkeeping standpoint) be practically pure profit, and the effect of that circumstance also must be taken into account.

Occasionally, these unknown and untried novelties are accepted by drug stores on a consignment basis. Care must be taken by the accountant to distinguish these consignment goods from the ordinary stock in trade. The store assumes no obligation to pay for them unless they are sold, and then realizes simply a commission on the sale. The various methods of consignment accounting cannot be discussed in detail here, but the principal facts of importance may be mentioned.

If the consignment goods are to be separated altogether from the regular stock, they must be omitted from the account representing goods delivered to the retail stores. The proceeds must also be eliminated from the sales reported by the stores. This latter may be accomplished by ringing the items up on a separate cash register (or cash register dial) or by use of a special sales slip covering each item sold. If the látter method is adopted, the total of these sales of consignment goods must be deducted from the grand total sales of the department as shown by the cash register report. In either case the head office will credit the commission earned to an income account on the general books and will credit the balance of the proceeds of the sale to the account of the consignor of the goods. Under such circumstances, any unsold consignment goods remaining in the store at an inventory date must be carefully excluded from the inventory valuations, since the merchandise is not the property of the store.

This theoretically correct method of treating the consignment goods is apt to prove too complicated to be practical. To avoid confusion, it may be necessary to treat the consigned goods for accounting purposes like regular purchases. In this case the consignor will be credited with the net worth of the entire consignment, based on the aggregate amount which will be remitted to him in the event that all the goods are sold. This amount is charged to the store merchandise account and sales are treated like sales of any other article.

A difference in procedure arises in case the entire consignment is not sold and it is decided to return part of the shipment to the consignor. Under such circumstances the goods when sent back to the consignor must be credited to the store merchandise account and not to the sales account. The difference between the amount originally credited to the consignor and the "cost"

value of the goods returned to him will represent the amount to be paid for the goods sold. The commission earned on the sale will, under this method, be buried in the general profit and loss account of the store and cannot be distinguished from the profit on the sale of any other goods. Neither method of treatment is wholly satisfactory, the one adopted being that which best meets the needs of the individual concern.

The performance of sales clerks is a factor which should be watched carefully in a chain of drug stores. In large stores there are a number of clerks employed and there is likely to be considerable difference in the industry, efficiency, and general value of different members of the personnel. It may well prove worth while to study the results obtained by each clerk along the lines suggested in the latter part of Chap. XVI. The clerk who waits on the greatest number of customers, makes the largest average sale, pushes and disposes of slow-moving goods, and produces satisfactory merchandising results in his department is probably a potential store manager of capability. The circumstances of chain drug store operation make it both possible and highly desirable to obtain information of this character, and its collection will doubtless repay many times the relatively small cost of accumulating the data.

Novelty Store Chains.—The type of stores to be considered under this heading is popularly known as the "5- and 10-cent store" group. Neither this popular title nor the one given in the heading are accurately descriptive, although it is difficult to find a better one. Such stores as come to mind when this group is considered carry a great many items that are not strictly novelties, and generally their range of prices is not by any means confined to 5 and 10 cents. What these establishments, in fact, develop into are department stores, dealing in the lower priced lines of goods and condensed into small space. They contain a bewildering variety of merchandise, but practically all the goods have certain characteristics in common. They are low-priced, compact, in heavy demand, and requiring almost no demonstration or handling.

This chain store field has up to date been pretty well monopolized by a few of the larger institutions. There have been developed, however, some small and moderate-sized chains dealing in the same or similar goods, and there appears to be a tendency toward further development in this direction. Some of the

stores are specializing in particular lines—like dry goods and house furnishings—and have increased their price range to $1 or more. The problems of all of them are sufficiently similar to be considered together.

As in the case of the chain stores previously discussed, the question of merchandise control is likely to be the outstanding one. The variety of goods and the comparative insignificance of the individual item make detailed perpetual inventories impractical. At the same time there is often sufficient variation in the retail mark-up to make control by the retail price inventory method difficult. A large percentage of the business of these stores will be done in staple and standardized articles. Another large percentage, however, is to be found in novelties. some of temporary and some of permanent public appeal.

A favorable factor, on the other hand, is the division of the stores into departments, each one of which records and reports its own sales independent of the others. This makes it feasible to divide up the merchandise accounts by departments and to check each one separately. The accounting forms must be elaborated to accomplish this and there is some additional clerical work involved, but the results to be gained are important and well justify the means.

Prices of goods sold in most of these stores are phenomenally low and profit on a individual transaction is naturally very small. With a narrow margin to work on it becomes vital to the store management to secure a rapid turnover of the investment. The capital employed by the concern must be turned again and again in order that the aggregate profit realized may represent a fair return on the average investment. If any of the money is tied up in slow-moving goods, the possibility of getting a return on that money disappears. It will be essential in such a business, therefore, to employ every feasible means of merchandise analysis in order to find out which goods represent a profitable investment and which items tie up capital without bringing in any appreciable profit. The accounting department should be charged with this work and a development of the methods outlined briefly in Chap. XVI will be one of its principal tasks.

Getting a sufficient volume of business to carry the fixed expenses of operating a store is another important problem in these concerns. This, again, is primarily a matter of merchandising, but the accountant may render valuable aid by indicating to

the management what these fixed expenses are, what variation in expense will result from increase or decrease in gross business, and how much business must be done at various profit margins in order to insure a satisfactory net result of operations. It is usually the policy to attempt to make a fairly uniform margin on all goods sold, but under certain circumstances it may be desirable to take on a line of goods to be sold at an extremely narrow gross margin, if the total gross profit of the business can be increased thereby without any attendant increase in the cost of doing business. The relations here existing are the province of the accountant and the buying and selling policies of the concern may well be based on his reports, if they are accurate, comprehensive, and intelligent.

Many of the problems of the novelty store are similar to those of the drug store. Theft of merchandise by customers is apt to be frequent and may cause extensive losses unless guarded against with care. Breakage and shelf wear in certain kinds of goods will cut into the profits heavily unless an exceptionally rapid turnover of such merchandise is secured. Inventory taking is not quite so difficult as in the drug store, because the items making up the stock have more individual identity and can be counted or measured with less trouble. It is more than likely that such inventories will be priced at retail figures and reduced to wholesale cost only by the application of general or average mark-up percentages to the totals by departments. The retail price inventory method can be used to advantage in many departments, although usually not applicable to all the goods handled.

In devising accounting methods and procedure, allowance must be made for the fact that the character of the store personnel is somewhat different from that in other retail establishments. The goods sold in such stores ordinarily require little demonstration or explanation and do not have to be handled except for wrapping. As a general rule most of the goods "sell themselves," and that is part of the merchandising plan. Less is demanded of the sales clerk and clerks of less experience, training, and general capability than the average are usually employed. Any accounting records or methods in which these clerks have a part must necessarily be of very simple character in order to insure that the results obtained may be dependable.

Clothing and Furnishing Stores.—The chain store concerns in this field have up to the present time specialized largely in men's

clothing. This is doubtless due to the fact that the articles dealt with are more nearly standardized, turn over with greater rapidity, and can be sold more readily by means of general advertising than women's wear. The lines of goods handled include practically all articles of men's clothing—hats, shoes, suits, and those necessary articles generally known as furnishings. Many chains of stores sell one of these lines only, but there are a number handling two or more and some deal in the whole list. Shoes are more frequently found in separate establishments than any of the other items.

The accounting problems of such stores have certain elements of individuality. The clothing store is practically the only establishment in the chain field (as generally recognized) where the individual items sold can be readily distinguished and identified one from another, and where the purchase of each customer is likely to be confined to one or a very few articles. This makes possible, and in most cases practical, a detailed perpetual inventory of the stock carried in the stores. Such a detailed perpetual inventory represents, of course, the ideal method of merchandise control, provided there is not an excessive amount of clerical work involved in keeping the records.

As has been stated previously, this detailed stock record can be maintained only when the accounting department is kept informed of the identity of all the goods sold in each period. This requires usually a sales slip made out by the clerk at the time the sale takes place, and describing the article purchased by the customer. This is feasible when the items to be described in each transaction are few and their relative value large—as in the case of a hat, a suit of clothes, an overcoat, a pair of shoes, or even such comparatively minor items as shirts, socks, underwear, and the like.

The keeping of a perpetual inventory is made additionally easy and desirable by the individuality of the goods. Each hat or pair of shoes has usually a style, a color, a fabric, and a size to distinguish it from the other articles in the line. These various characteristics can readily be worked up into a code number by which the goods can be referred to. This may be the manufacturer's lot number or a lot number assigned to the goods by the store itself. In either case the description on the sales slip need only repeat this code number (which is assumed to include the distinguishing points referred to above). The accounting

department will then be able to check that item out of the stock as having been sold, and at the conclusion of a period will know not only the quantity and value of the goods assumed to be remaining on hand but also the individual identity of practically every article.

These stock records will probably be kept on file at the head office and should be brought up-to-date daily by recording both the items delivered to the stores and those sold by the stores during the preceding business day. Kept in this fashion the records furnish not only a means of control from the accounting standpoint, but also furnish a valuable guide to the merchandise manager in determining buying and advertising policies. Any slow-moving goods of seasonal character—and these must be disposed of promptly to avoid loss—will be revealed by the stock records. The store can then put on a special campaign to get rid of the items by means of advertising, selling talks, reduced prices, or all three.

The form of stock records used by enterprises of this kind will probably be different from those employed in the ordinary merchandising business. Where different styles and sizes are concerned and a given card or sheet may cover several styles or several sizes, it is the frequent practice to mark the record off into squares and indicate one set of subclassifications in the horizontal columns and the other set in the vertical columns. This departure from the usual debit and credit (receipt and disbursement) form entails a revision of the method in making the entries on the card. The items are often indicated by individual lines or tally marks when placed in stock, and these lines are erased or crossed off as the goods are sold. Numerous suggested forms for such records have been published in the men's wear magazines and need not be reproduced here. All have a common purpose—to keep before the management a current understandable record of the items making up the retail stocks.

Merchandise analyses are essential in the type of business considered because of the factors of changing style and seasonable demands. The management of such a store must know the exact condition of its stock to insure that the goods on hand will be disposed of before the close of the season in which they can be sold. It is not usually possible to interest the public in straw hats in the winter time, and a merchandise manager having a chain of retail hat stores under his direction must keep constantly before

him a record of the condition of the stock in each one in order to avoid an accumulation of goods which at the end of 30 days may represent practically a total loss. The function of the accountant in such a situation is too obvious to require emphasis.

In place of a sales slip made up by a clerk at the time of the sale, some stores use to advantage a sales tag, which contains a complete description of the article and on which needs be inserted only the date of the sale and possibly the initials of the clerk making it. These tags bear the retail price and also the cost price in code. They can be prepared at the time the goods come into the store, usually somewhat in advance of the heavy selling season and at a time when the clerks have relatively more leisure. These tags are removed from the article when sold and placed on file in the cash register. At the end of the day's business they constitute a complete record of all transactions, both from a cash standpoint, a cost standpoint, and a merchandise control standpoint.

It may be noted that where a perpetual inventory is used in the retail stores, the method of handling the general ledger accounts is likely to differ in some particulars from that followed where a periodic physical inventory is relied on for book figures. The use of the periodic physical inventory in adjusting the ledger accounts was indicated in the concluding paragraphs of Chap. VI. Where there is available for each period a list of all the goods sold and the cost price of these goods can be determined, the logical bookkeeping procedure will be to credit the "Merchandise" account and charge an account called "Cost of Goods Sold" with the aggregate cost value of those goods. Under this plan the balance of the "Merchandise" account should represent the cost value of the merchandise remaining on hand. The "Cost of Goods Sold" account will be transferred to the profit and loss summary account at the end of the period (see Chap. XIII). The net effect of the transactions is, of course, identical with the result arrived at by the other method.

In this type of business, again, it is important to keep track of the performance of the individual clerks. The personality and ability of the salesman plays a large part in merchandising men's clothing and furnishings. The good salesman and the poor salesman in a clothing store will inevitably be marked by the results of their selling activities, taken over a reasonable period. It will unquestionably be to the advantage of the chain to weed out the

undesirables and to promote the efficient clerks to more responsible positions. The possibilities along this line are great and can be taken advantage of with comparatively little clerical labor or expense.

Personal Service Chains.—When the various types of chain stores selling commodities have all been considered, there remains for discussion that class of store which has previously been referred to as selling a service rather than tangible merchandise. There are numerous examples of this type of retail establishment, and the chain enterprise is playing a steadily increasing part in the field. The advantages which come from serving the public in a definitely standardized way, at prices held down by efficiency and volume of business, have brought about the entrance of chain concerns into lines of activity which were formerly handled solely on an individual basis.

There is wide variation in the characteristics of these "service" establishments. In some cases the service involves handling of goods belonging to customers; examples are laundries, cleaning-dyeing-pressing establishments, and shoe repair shops. In other cases practically no goods are handled and the service is a directly personal one; examples are barber shops, beauty parlors, and shoe shining establishments. In still other cases the service consists of affording patrons the use of facilities; pool rooms, dance halls, and possibly even moving picture shows might be placed in this classification. Some of these establishments are a long way from the average individual's idea of a "store," but, as was noted in one of the introductory chapters of this book, the principles of chain store operation may well be applied to the accounting problems of most such undertakings.

Where there is no merchandise handled, the merchandise control problem, of course, disappears, frequently to be replaced by another of equal importance. It is essential to efficient centralized management of undertakings such as those above mentioned that some form of internal check on the revenues of each unit be established. Misappropriation of funds may offset all other advantages unless the enterprise is amply protected in this regard.

For such protection the use of mechanical devices is important. In places where an admission is charged, provision is usually made for serially numbered tickets and an accompanying mechanical ticket vending machine which automatically records

the number of tickets sold. Whether or not such a device can be placed in use, it will usually be desirable also to provide internal check by means of having one employee check up on the work of another—as, for example, where one member of the staff issues a ticket or other receipt for the money paid and another collects these receipts on performance of the service. Where the circumstances make it impossible to put this plan into effect, a cash register of some kind is about the only remaining protection which can be secured. Careful comparison of the results from different units in the chain and frequent interchange of employees between various units will assist in discovering any laxness or dishonesty if such exists.

The accounts kept for most of these establishments differ in some particulars from those previously discussed. There will, for example, be no "Merchandise" or "Cost of Goods Sold" account, and, consequently, no "Gross Margin" figure arrived at. The profit or loss of the enterprise will be found simply by comparing the total expenses of a given unit with its total revenues. All the charges in connection with the operations, therefore, will appear in some operating expense account. The classification of operating accounts will differ materially from that indicated for the ordinary type of store or warehouse. The appearance of the profit and loss summary accounts and the operating and financial statements will also differ correspondingly.

Statistical analyses of the results in such enterprises are of particular importance. In the first place, the volume of business done in these establishments usually fluctuates considerably from one period of the day to another and from one day of the week to another. Arrangement of the working hours of employees and for provision of facilities in general may well depend on the volume of business to be expected at a given time. This volume can be determined accordingly from a series of reports which can easily be prepared by the manager of the retail unit. By intelligent use of these statistics a considerable saving in expense may be effected.

Another factor to be considered in this same connection is the possibility of attracting additional trade during dull periods by offering special inducements in the way of reduced prices, premiums, etc. If the manager of the moving picture show finds that his theater is crowded to capacity, with patrons turned away at certain evening hours, while it is only half filled in the

afternoon, he might well alter his scale of prices in order to attempt a more even distribution of the load over the entire day. This and similar price variation plans are in effect in many enterprises of the character mentioned. The extent of the variation needed and the exact effect of changes on the profit and loss account may be determined scientifically from accurate accounting data, where it may otherwise be arrived at by nothing more than guess work.

Another point to be recollected in this connection is that in many cases where a service is supplied or the use of facilities offered, expense of operation increases negligibly, or not at all, with an increase in business. Every additional hour's rental from a billiard table, for example, represents practically 100 per cent net profit to the concern. The extent to which the capacity of the establishment is being used is, therefore, even more important in business of this type than in the concern where a commodity is bought and sold. The percentage of use—the so-called "load factor"—should be known by the management for each period in every establishment in order to obtain maximum return on the investment.

Fixed charges are a large element of expense in many establishments in this group. The effect of insurance and taxes must be taken into consideration in making plans for growth and expansion, and depreciation of permanent equipment must be remembered and conservatively figured. Wear and tear is heavy in most of these cases, and renewals and replacements will require considerable expenditure which does not actually increase the value of the property but merely extends its life. The factor of interest on investment must be remembered when it is planned to install additional facilities or to open another unit in the chain. The capital invested may turn over slowly and a sufficient margin of profit must be insured to give a reasonable rate of return.

In case the company takes charge of the customer's goods, as a laundry or cleaning establishment does, provision must be made for careful check on the goods as they enter and leave the establishment. There is, of course, no merchandise account and the records of goods on hand will not constitute a part of the accounting system in the ordinary sense of the term. Since the establishment assumes responsibility for the articles, however, it must be able to trace and locate them at any time, and should preferably have some evidence of their return to the customer

when they have been cleaned or repaired. Losses on claims and even more serious losses from dissatisfaction of customers may be avoided by an efficient set of records covering this point.

General Considerations.—In the foregoing sections attention has been called to the major problems of some of those business enterprises which are most prominent in the chain store field. It goes without saying that not all chain enterprises have been mentioned. At least one of the best known examples—the cigar store chain—has been omitted altogether. The ones which have been discussed, however, are probably typical of the large majority of chain store concerns; accounting problems of the cigar store chain, for instance, are surprisingly like those of the grocery or tea stores, despite differences in its merchandising conditions.

Those establishments which do not seem to fall into any of the classes described are either exceptional in character or have some special features which place them outside the limits of the chain field proper. Where the unit is in itself a very large affair—such as a hotel—its individual problems become of much greater importance than its problems as a member of a chain, and no attempt is, therefore, made to cover them in this book.

It is possible in the limited space of a single book to discuss only in a general way the forms and methods which will be utilized in different retail lines of business. The illustrations which have been given in the earlier chapters are largely suggestive in character and most of them would probably require modification or adaptation if they were to be used in any particular chain of retail stores. It has been the intention to indicate the general principles involved and the kind of methods by which the problems presented may be solved, rather than to attempt the impossible feat of designing forms which would meet the needs of all retail chain stores of every description.

Illustration of specialized forms and detailed description of the accompanying methods is rendered unnecessary in any case by the volumes of literature already published on practically every one of these subjects. Almost every retail line has its national association and usually its national publication. In these publications and at the meetings of these associations there have been frequent and extended discussions of accounting problems. For the accountant of a chain enterprise in one of these groups, the problem would seem to be to combine the methods which have been worked out for his particular retail line with those

especially adapted to the requirements of all chain enterprises, as illustrated in this book.

When this combination of ideas has been effected, it is further necessary to adapt the resulting system to the peculiarities of the individual concern with which he happens to be connected. These individual peculiarities cannot be overlooked, any more than can be the general characteristics of the industry as a whole. A successful system must take account of the particular retail type, chain store characteristics in general, and the individual needs of the concern which is to make use of the methods.

In so far as differences in lines of business are concerned, it is important always to keep in mind what are the vital features of successful accounting methods for the type of business under consideration. If the problems are chiefly those of merchandise control, it will be an unsuccessful system which places its principal emphasis on some other feature of the accounting work. In each business it should first be determined what these vital outstanding problems are, and the methods employed should then be directed primarily toward a solution of those problems, with such supporting and complementary procedure as is necessary to provide a comprehensive and well-rounded system of accounts.

CHAPTER XIX

PRACTICAL ECONOMIES IN ACCOUNTING METHODS

Much has been written on the subject of accounting methods for various enterprises without any specific suggestion as to how these methods can be placed in effect or how the problems incident to their design and installation may be met. It is not unnatural to find principles and general considerations emphasized when the subject is being discussed by someone unfamiliar with the actual conditions in a given organization. There are certain fundamentals of procedure, however, which might well be given more prominence than is ordinarily bestowed upon them, and it is the purpose of this chapter to indicate briefly what some of these fundamentals are and how the accounting work of a chain of stores will be facilitated by recognizing them.

It is not the purpose to suggest a form of organization or to urge the adoption of one method or device when another one may serve equally well. In view, however, of the evident lack of knowledge in many quarters of certain simple economies and conveniences in the layout of accounting systems, some discussion of a few of the primary ones may not be out of place.

Mechanical Devices.—A great deal of accounting and record keeping work today is carried on by means of various mechanical devices. Some of these devices are well known, but many are totally unfamiliar to the average business man. There are unquestionably many concerns today doing a large volume of record keeping by hand where the work could more economically be done by machine if the members of the organization were sufficiently familiar with the devices on the market to realize where they could be used to advantage.

The use of mechanical devices for accounting purposes goes hand in hand with a large volume of transactions. A cash register or a calculating machine represents a substantial investment of capital, and unless there is a considerable quantity of work to be handled, the cost of the machine may easily be greater than the cost of the clerical labor required to do the work. After

a certain point is reached, however, the machine becomes much more economical, and as the volume of business handled increases, the economy affected by the machine becomes more pronounced.

The average single retail store has insufficient volume of business or number of transactions to justify the use of the more elaborate mechanical devices. Even in a single retail store, however, the cash register has come into almost universal use. Where a chain of stores is concerned, the amount of investment required becomes small in proportion to the total capital employed, and the related expense negligible in proportion to the amount of work performed.

The mechanical devices which the chain store can use to advantage fall into two classes. One of these includes machines which calculate and compute, such as the adding machine and the various devices for multiplying, dividing, figuring percentages, etc. The other type actually keeps accounting records, possibly performing certain calculations at the same time; in this class fall billing machines and an extensive line of similar devices by means of which stock records, payrolls, invoices, and even ledger accounts are maintained.

The use of the cash register in the retail store has already been frequently referred to. Mention is also made of the use of a special type of adding machine in conjunction with the cash register for purposes of internal check and statistical information (see page 22). Mechanical ticket vending and collecting machines have also received passing mention in Chap. XVIII. These are the principal types of machine which are likely to be needed in the retail stores.

In the head office a greater variety of mechanical devices may well be employed. A machine for calculating extensions in inventories becomes almost a necessity. The simplest type of such machine merely makes multiplications, the result being shown on a dial but not recorded in printed form. Where the concern has a central warehouse and is constantly billing goods which are delivered to the retail stores (see Chap. VII), the work of extending cost prices will be facilitated by use of a similar machine. Where there are many such extensions to be made, the cost of clerical labor required may be several times that of a mechanical calculator.

When a perpetual inventory record is maintained for warehouse stocks, it will often prove to be desirable to carry the record on

some sort of bookkeeping machine. Such machines have special record forms for the purpose mentioned and they not only set down the amounts received into and disbursed from stock, but quickly calculate balances on hand, both quantities and values. When the volume of business is large, a single clerk using such a machine may readily accomplish the same result as three or four stock clerks keeping records by hand, at the same time producing more accurate and legible results.

Bookkeeping machines are also widely and successfully used for keeping records of customers' accounts, some of them being designed to prepare a statement of the account for submission to the customer at the same time that they set down the particulars for purposes of office record. Their use in chain enterprises is, of course, limited to those establishments which carry charge accounts with customers.

When it comes to the compilation and presentation of statistical data of any sort, a calculating machine proves a great saver of labor and expense. The type of machine on which percentages, unit prices, and the like can be readily calculated is somewhat more expensive than the computing devices which simply multiply, but in a large chain where a prompt and complete report is desired, such a device may reasonably justify itself.

The economies which may be effected along this line are especially to be borne in mind when the question of installing new methods or collecting additional data is raised by the management or by the accounting department. It is a common occurrence for commercial enterprises of all kinds to reject a proposed improvement in methods because of the anticipated additional cost in terms of clerical labor. Frequently, the clerical work can be handled by a mechanical device with no more actual labor and often with no more expense than is entailed by the methods already in use. Entirely aside from the question of profits to be gained from accurate and complete knowledge of what is going on in the concern, the management may find on investigation that there is actually a simpler and more efficient method of keeping the records, which will give the results wanted and at the same time cut down the cost.

Accounting Forms.—Satisfactory methods for a chain store concern of any considerable size involve the use of a number and variety of forms. The manner in which these forms are prepared

and handled may make all the difference between successful and unsuccessful operation of the accounting system.

The forms are the means which the accounting department uses to collect the data needed for its books of account. They will usually be filled out by the store managers, clerks, warehouse employees, and others with little knowledge of accounting. They must therefore be explicit, easily understood, and logical in arrangement. The material need not be presented as it would in an accounting record or even expressed in accounting terms. It will be sufficient if the data provided can be compiled and reworked by the head office in such a way as to give the desired results.

So many mistakes are made in adopting new forms that the management becomes wary of changes and instinctively objects to any alteration of the existing records. On innumerable occasions a concern has purchased a large and expensive lot of new forms, only to find after a short trial that they were unsuitable. The expense of this stationery then represents practically a total loss. Such losses should and can be avoided.

Stationery manufacturers have placed on the market many standard forms supposedly suitable for all needs. While each individual concern will usually find that it can get better results with a specially designed form, these standard designs give excellent service for trial purposes. If the accounting department wishes to put into practice a new idea, a limited quantity of standard and relatively cheap stationery may be purchased and used in operation to test the idea. After the forms have been used for a month or two, it will be possible to tell where the difficulties are and what points need to be covered when special forms are ordered. The special design can then be drawn up, approved carefully and intelligently, and put into operation when the supply of standard forms has been exhausted. In this way the concern may avoid costly mistakes in trying out new accounting methods.

The standard forms referred to are on sale at some stationery stores in practically every large city. If they cannot be secured locally, it is always possible to get samples and prices direct from the manufacturer. Printers of goods of this character usually advertise in trade publications and the variety of their offerings in stock designs and sizes at reasonable prices will surprise anyone who has not investigated the subject.

When an order for special forms is placed with the printer, some additional economies can be effected through knowledge of the conditions under which the printing establishment works. The design of the form may result in a difficult job of composition for the printer, whereas a similar but cheaper ruling may serve the accountant's purpose equally well. Column and cross-rulings are particularly apt to make trouble and expense. It may be desirable to have the paper ruled in one operation and printed in another, although this method, too, involves some additional cost. If the printing establishment itself has not the facilities for ruling (as distinguished from printing), the jobber who supplies the paper, or some other concern, may be able to take care of the ruling. The point is worth investigating and the printer may be able to give some good advice on this subject if he is afforded an opportunity to do so.

Selection of the paper to be used is also worthy of some attention. It is uneconomical to use good paper where cheap paper will serve, and it may also be false economy to attempt to get results with a cheap grade where a good paper is really required. The circumstances under which the form is to be filled in must be taken into consideration—whether pencil or ink is to be used, whether the writer will have a good or bad surface on which to write, whether a great many of the forms will have to be handled at once, making a bulky package to handle, and like questions. These points should be considered carefully before the stock to be used is selected.

It may save time if different colors are used for various purposes; where several copies of the same form are to be prepared, for example, every copy can be easily distinguished if it appears on a sheet of different color. Some concerns have assigned one color to each store in the chain and make all forms for use in that store of the same color. Possibilities along this line are great and the cost of varicolored paper is not excessive.

The proper size for forms is another consideration. The first question is the convenient size for handling. Excessively large sheets are troublesome to work with and to file. Forms of odd shape and size do not lend themselves readily to efficient handling. Ledger and journals which are bulky and unwieldy cannot be used for reference as conveniently as more compact books.

Paper used for printing, like practically all filing equipment, normally comes in certain standard sizes. Where forms are

ordered which do not cut economically from these standard sizes, there is likely to be a large element of wastage in printing and it will be found troublesome to file or bind the forms after they have been used. Standard sizes of cards, for example, are 3 by 5, 4 by 6, and 5 by 8. Bond papers come in sheets 17 by 22 and 19 by 24, and are best cut to even subdivisions of these sizes, like the 8½ by 11 letterhead. Forms prepared without regard for the customs of the printers and paper makers are sure to prove more expensive to purchase and in the long run are likely to be unsatisfactory to handle.

Provision should be made for careful filing of all important records. This is assured in the case of bound books, and usually where loose-leaf ledgers and journals of standard type are employed. Forms like store reports, inventory summaries, and merchandise transfer invoices should be filed away with equal care. These can be kept on standard "post" binders; all that is necessary is to punch the sheets in the proper places at the top or side. If this method of binding is not satisfactory, a regular ledger binder may be adopted; in that case a binding margin on each form will have to be provided.

Another point in the design of accounting forms is provision of spaces for noting the approval of all members of the staff who must handle the form in its course through the establishment. Each individual who is required to authorize a transaction or to audit, price, extend, or enter it should signify that he has taken care of his part of the procedure by placing his initials in a space set aside for them. This feature of a satisfactory form has been omitted almost altogether in the illustrations given in this book, but it should by no means be overlooked in the design of practical forms for actual use. The route which the record will follow from the time it is originally prepared until it is finally filed away should be charted in advance, and the rulings and instructions should make it necessary for the employees to record definitely each step in its progress.

The instructions contained in the form should be explicit and definite. Where several employees must each supply a part of the information, it is usually desirable to designate at the head of each section the title of the employee or department which is to use that portion of the form. Instructions may well read imperatively: "Store Manager—Do Thus and So." Whatever

its literary merits, such language is at least not likely to be misunderstood.

Care should be taken not to require the submission of any superfluous information. Data should not be called for on two forms where it can be gained from one. If the accountant finds that there is duplication in the records anywhere, an effort should be made immediately to eliminate it, either by combining the forms concerned or changing the procedure. As has previously been suggested, preparing statements is to a certain extent duplication, and it may be possible through proper arrangement of the forms to accomplish at the same time an intelligent statement and a permanent accounting record. There is an opportunity along this line for ingenuity and constructive ability of a high order.

Arrangement and Numbering of Ledger Accounts.—Arrangement of the accounts in the general ledger may be either a help or a hindrance to the accounting department, depending on the skill or carelessness with which the problem is handled. Some attention has already been given to this subject in Chap. XII, but it deserves a little further discussion here. The proposition seems on the surface such a simple one that it is frequently neglected and seldom is treated with the care to which it is entitled.

The order in which accounts are arranged in the general ledger should be determined with two different requirements in mind. In the first place the order should be such as to facilitate the work of the bookkeeper when he comes to make postings to the accounts from the books of original entry. Other things being equal, it will be desirable to have the accounts which receive postings from the same book appear in the same part of the ledger. This will avoid lost time in fingering through a number of pages to locate each account which is to be posted. Minor savings in this connection may in the aggregate amount to a substantial economy.

This feature, however, is probably less important than that connected with taking off statements from the books. At least once a month a general ledger trial balance has to be prepared, and at numerous intervals the ledger accounts are referred to for similar purposes in connection with the results of past periods. There is a logical order followed in the preparation of a trial bal-

ance and it will be profitable to have the ledger accounts appear in this same order in the binder.

Assuming that all the general accounts of the business are kept in one ledger, the trial balance may best be arranged in the following order: current assets, fixed assets, intangible assets, current liabilities, deferred liabilities, capital, undivided profits, sales revenues, cost of goods sold, operating expenses, miscellaneous income and expense items. Within each of these classifications further subdivisions are made. Among the assets and liabilities the arrangement will be the same as the order of the items in the balance sheet, while in the profit and loss section the operating expenses will be listed in the order of their importance, similar items being placed close together when that is possible.

It will usually be found that such an arrangement makes it easy to take off a satisfactory trial balance, which can, in turn, quickly be worked up into a set of financial and operating statements. It is likely that this arrangement also is an aid to posting the ledger; in fact, the books of original entry are frequently laid out with this thought in mind.

The question of the subclassifications and subsidiary ledgers has already been given rather extended discussion. It may be repeated that any group of accounts which becomes so large as to occupy an undue amount of space in the general ledger should properly be transferred to a subsidiary record under a control account. In form this subsidiary record may be the same as the general ledger, but if the circumstances require, a different type of ledger account sheet may be used for each class of items. Some of these suggested subsidiary ledger forms have been illustrated in Figs. 44, 45, and 46.

It will help in arrangement and grouping of accounts if there is adopted a set of account numbers, scientifically designed to meet the requirements of the business. The numbering system may be simple or complex, dependent on the nature and complexity of the business operations. Certain types of numbering systems are capable of practically unlimited expansion. This is provided for by assigning certain groups of numbers to certain types of ledger accounts, and designating the subdivisions by means of expanding these numbers on a decimal system basis.

For example, there might be set up the following general accounting divisions, each having the key number given opposite:

1. Assets
2. Liabilities
3. Revenue Accounts
4. Cost of Goods Sold Accounts
5. Store Operating Expenses
6. Warehouse and Handling Expenses
7. Administrative and General Expenses.

Divisions under the various accounts would be made by expanding the designated account number. In case of the assets, for example, the subdivisions would be given the following numerical code:

11. Cash
12. Customer's Accounts
13. Merchandise Inventories
14. Operating Supplies and Prepaid Expenses
15. Store Equipment
16. Warehouse Equipment
17. Delivery Equipment
18. General Office Equipment.

When further subdivision under these headings became necessary, each one could be further expanded according to the same method. In the case of cash, for example, a number of bank accounts might be maintained and each one would require a separate account. These might be numerically designated as follows:

111. First National Bank
112. United States National Bank
113. Central State Bank
114. City Trust Company.

Under a consistent arrangement, each of the store petty cash funds would, theoretically, be entitled to its own number, but where these accounts are carried on the imprest system they may well be grouped for ledger purposes in a single account, which under the above numbering system, for example, might be designated as 119.

The same principle of subdivision is applicable throughout. In the case of some of the main subdivisions, little subclassification will be required. Sales revenues, for example, will need to be

divided only according to the number of stores. If a numbering system of three places is being used and there are not more than 10 stores in the chain, the sales revenue accounts may be individually designated as follows:

301. Sales of Store No. 1
302. Sales of Store No. 2
303. Sales of Store No. 3
etc.

The related cost of goods sold accounts will be given corresponding numbers in the 400 series—401, 402, 403, etc.

In the case of operating expenses, the problem is a little more complicated. Here the expenses are subdivided both according to the class of expense and to the retail store concerned. If not more than nine expense subclassifications are likely to be used, however, this part of the plan can be worked in very nicely by use of a three-digit number, in which the initial figure will represent the operating expense groups, the second one the expense subclassification, and the third the retail store number. According to the plan suggested above, operating expenses of all stores would be in the 500 series. Accounts numbered from 511 to 519 could represent "Wages" expense of the stores numbered from 1 to 9; accounts from 521 to 529 would represent "Rent" of the same stores, etc.

It is apparent that expansion along this line is limited to nine subclassifications and nine retail stores. There is nothing to prevent, however, the expansion of the numbering scheme into a four-place series. If there are more than ten stores in the chain, for example, wages expense may still be given the key number 51, while the numbers from −01 to −99 may be used to designate the stores. Wages in store No. 1 would then be account number 5101; wages in store No. 17 would be account number 5117, etc.

Another convenient application of this numbering method is to the problem of control accounts. It may be desired to carry a control in the general ledger covering a number of subaccounts, each one of which has been given its own distinctive number. This can very easily be done by reserving the numbers ending in 0 for control account purposes. In the case of the bank accounts above mentioned, for example, if it were decided to remove those ledger sheets to a subsidiary record, a single control account

might be carried under the account number 110, which would then control a ledger consisting of accounts number 111 to 119. Where the number of accounts in the subsidiary ledger is greater than nine, the four-place numbering system can again be brought into use.

To those unfamiliar with the use of numerical designations for accounts, such a plan is likely to seem at first a very complicated arrangement. In point of fact, the arrangement soon becomes a simple one to operate. When the accountant has grasped the fundamentals of the numbering scheme, its further development is a proposition which he can handle almost without thought. The exact place of any account in the general scheme can be determined merely from its number, and reference to its title will generally be wholly unnecessary. The particular numerical arrangements presented above are, of course, merely suggestive in character. The individual accountant will adapt the plan to his own needs.

Several other suggestions in regard to keeping the ledger accounts may be in order. First, it is desirable, so far as possible, to keep accounts of a minor and unimportant nature out of the general ledger. Most businesses accumulate a collection of miscellaneous accounts receivable and accounts payable arising out of unusual and special transactions. The individual accounts usually are small, and if there is any considerable number of them, they ought to be transferred to a "miscellaneous accounts" subsidiary ledger. This is to avoid obscuring the important facts in the general situation by cumbering trial balances and statements with minor items.

Something similar applies to items posted in a ledger. It was once the practice to post every transaction individually in the account which it affected. With the adoption of columnar journals, control accounts, etc., it became possible to combine a large number of transactions in one figure before posting. This combination of items from a given book of original entry may be accomplished even if no single column is provided in the journal for them. The "Sundries" column in which they appear may be recapitulated at the end of a period and the total applying to each ledger account will then be posted in one figure. In a given month, then, in any one ledger account there will be only one posting from each book of original entry. This reduces the amount of space occupied by the ledger accounts, and also cuts

down the likelihood of confusion and error in footing and balancing the accounts.

Economical Use of Accounting Records.—In conclusion it may be well to repeat certain statements made at the outset. Accounting records in a chain enterprise, or in any other business, are kept for certain definite purposes. The accountant should understand what these purposes are. If there is any record maintained which is shown to have no purpose, it should be abandoned. The converse is likewise true; if a need is felt for any record not now in use, it should be installed. Successful operation of a chain of stores demands that the management know the facts and be in a position to act on them promptly.

It has been the endeavor in this book to outline and describe the proper methods of accounting for chain enterprises. It is not pretended that all of these methods are applicable to every case or that all cases are comprehensively covered in this volume. Fundamentally, however, practically all chain store enterprises are alike from an accounting standpoint, and it will be an extraordinary situation in which the principles of cash safeguards, merchandise control methods, accumulation of operating data, and general accounting procedure here described do not furnish at least a basis for the development of an accounting system.

The methods and records here presented are of the sort considered practical for the type of enterprise under consideration. Many concerns do not maintain so complete a system as here advocated. In some cases it may not be necessary, but in general a business of the size and complexity of the ordinary chain store enterprise can hardly afford to operate with less knowledge of its affairs than will be supplied by the kind of accounting procedure explained in the foregoing chapters. The clerical work involved is not excessive, provided the methods are efficient, and the cost should be reasonable in comparison with the service rendered. All expenditures for accounting service are relative, and it is the relation of the expense involved to the results to be obtained which should be studied in connection with any proposed modifications of present methods or adoption of new ones.

Often the lack of well-developed records in a chain store concern is due to a point of view gained by the management in a single retail store. The accounting requirements of a chain of stores differ in a great many particulars from those of an independent retail enterprise. Even with a corps of experienced

district managers, inspectors, etc., the head office cannot expect to exercise the same close supervision over the retail units of the chain as is exercised by the sole proprietor of a single store. Reports, analyses, and statements must be used to tell the management what the individual proprietor learns by simple observation of what goes on around him. Different conditions require different methods for the accomplishment of successful results.

A good accounting system can be built up gradually. Most satisfactory methods are capable of expansion. If there is any question about a particular plan, it can be tried out first in a small way to determine whether its use will be justified. Elaboration of the accounting records is invariably necessary along with expansion of business and should keep pace with it. It is nevertheless possible to add gradually to the system in use as each particular need makes itself felt, and thus to avoid steps in the wrong direction which may have to be retraced with difficulty at some later date.

The information gained from the accounting records is to be used. Every set of accounts is a storehouse of facts and figures, which can be of the utmost benefit and advantage to the owner or manager of the business if they are set before him in compact, intelligible form. The outstanding and successful accountant of the future will be one who is not merely a compiler of figures but an analyst and interpreter of operating results and financial conditions. The chain store field offers unlimited opportunities to men whose knowledge of proper accounting methods and their application to individual problems has fitted them to prepare and present the data upon which the management must rely in conducting its affairs along successful lines.

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